

How do views shape words?

How do words shape cities?

- I. Writing politics through motifs
- II. Writing history through artefacts
- III. Writing culture through technologies
- IV. Writing visions through images

WRITING CITIES

Hall, Fernández Arriagoitia and Dinardi, Editors

WRITING CITIES 1.

A collaboration between the Cities Programme at the London School of Economics and Political Science, the Department of Urban Studies and Planning at the Massachusetts Institute of Technology, MIT Media LAB, Harvard Graduate School of Design and Harvard Law School.

WRITING CITIES

Working Papers Volume 1.

How do views shape words? How do words shape cities?

A collection of working papers by graduate researchers of the Cities Programme at the London School of Economics and Political Science (LSE), the Department of Urban Studies and Planning at the Massachusetts Institute of Technology (MIT), MIT Media LAB, Harvard Graduate School of Design and Harvard Law School.

Edited by Suzanne Hall, Melissa Fernández Arrigoitia and Cecilia Dinardi

This volume was published in London in 2010

Cities Programme
London School of Economics and Political Science
Houghton Street
London WC2A 2 AE
UK
Tel +44 (0)20 7955 6828
<http://writingcities.net/>

© Individual authors for their respective chapters 2010
ISSN 2042-4361 Working Papers

All rights reserved. No part of this publication may be reproduced, stored in any retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher. The authors have made every effort to credit all sources with regards to the usage of reproduced images.

Layout by Gunter Gassner and Suzanne Hall
Printed and bound in Great Britain by the MANSON Group Limited, London

To Richard Sennett, who initiated the Writing Cities Project in 2008.

Contents

Acknowledgments	6
Contributors	7
Introduction: The Writing Cities Collaboration <i>Suzanne Hall, Melissa Fernández Arrigoitia and Cecilia Dinardi</i>	10
Writing Cities: A Roundtable <i>David Frisby, Gerald Frug, Richard Sennett and Fran Tonkiss</i>	14
I. Writing politics through motifs	
1. Cities under Franco: A Metonymical Approach <i>Olivia Muñoz-Rojas</i>	24
2. Digging, Sowing, Tending, Harvesting: Making War-Fair <i>Gina Badger</i>	32
3. For Whose Benefit? The Role of Consultation in the Compulsory Purchase of the Site for the 2012 Olympic Games in delivering a ‘Sustainable Communities’ Legacy <i>Juliet Davis</i>	44
II. Writing history through artefacts	
4. Writing Urban Stories from the Walls of a Building: The Case of the Post and Telecommunications Palace in Buenos Aires <i>Cecilia Dinardi</i>	56
5. The Canal in the City of Gardens <i>Nida Rehman</i>	68
6. The Mughal Pavilion <i>Ninad Pandit and Laura Lee Schmidt</i>	82
III. Writing culture through technologies	
7. Beyond Use: Material Consciousness and Creative Engagements with Urban Infrastructure <i>Susanne Seitinger and Tad Hirsch</i>	94
8. Sensor Narratives <i>Orkan Telhan</i>	106
9. The Internet and the City: Blogging and Urban Transformation on New York’s Lower East Side <i>Lara Belkind</i>	116
IV. Writing visions through images	
10. Questioning Pictures of Urban Futures <i>Torsten Schroeder</i>	130
11. Skylines and the ‘Whole’ City: Protected and Unprotected Views from the South Bank towards the City of London <i>Gunter Gassner</i>	142

Acknowledgments

The Writing Cities Project is a student-led collaboration and a process of exchange between graduate students from the Cities Programme at the London School of Economics and Political Science (LSE), the Department of Urban Studies and Planning at the Massachusetts Institute of Technology (MIT), MIT Media LAB, Harvard Graduate School of Design and Harvard Law School. It emerges out of a process of enquiry and discussion about the city, in which energy has been invested by students and faculty members. The project has substantially benefited from the generosity and intellectual commitment of Fran Tonkiss, Richard Sennett, Gerald Frug, and David Frisby.

Our project would not have materialised without the institutional support of the LSE, MIT and Harvard. We gratefully acknowledge funding support for this project from the Art and Humanities Research Council Student-Led Initiative Fund (AHRC), and the LSE's Research Investment Fund.

Our thanks to Olivia Muñoz-Rojas and Juliet Davis who participated with us in organising the 2009 Writing Cities Workshop, and to Gunter Gassner for the design and layout of the publication. Thank you to Susanne Seitingner who has provided constant assistance throughout the Writing Cities project.

Finally, we extend our great thanks to all of the authors in this collection who first submitted their papers for the Writing Cities Workshop in 2009, and then refined their ideas after three rounds of review. We are delighted to present their work back to them in this first Writing Cities volume.

Contributors

Gina Badger is a practising artist and writer, particularly interested in urban ecology and environmental history. Recent products of her research include a radio show based on ambient field recordings, radioactively-colored seed bombs, pedagogical experiments in collaborative practice, a garden of weeds, and a series of workshops on herbal genecology. Hailing from Western Canada's prairies, Gina began her studies in Montreal and is completing a Master of Visual Studies through MIT's Program in Arts, Culture and Technology.

Lara Belkind is an architect and urban planner, currently finishing a PhD at Harvard's Graduate School of Design. She has published articles on internet culture's effects in urban space, and a history of urban camouflage on New York's Lower East Side. Her dissertation examines infrastructure as a space of conflict and negotiation in contemporary Paris. Lara has taught design studios at Yale and at Harvard. Her professional work has included developing urban regeneration plans with city and state agencies in New York and Washington D.C..

Juliet Davis is working towards an AHRC funded PhD in Sociology at the Cities Programme, LSE entitled: *Framing an Olympic Legacy: Mediations in Urban Change in London's Lea Valley*. Juliet is a Fellow at the LSE Cities Programme, and teaches concurrently in the Department of Architecture at Cambridge University. She has also held a Senior Lectureship in Architecture at Canterbury School of Architecture, and has worked as an architect on numerous urban and architectural projects in London. Recent publications include: 'Urban Catalysts in Theory and Practice' in *Architectural Research Quarterly*, and 'Re-imagining Bishopsgate Goodsyards' in *Architectural Research Quarterly*.

Cecilia Dinardi is a cultural sociologist currently working towards a PhD in Sociology at the LSE entitled: *Renewing the City, Rebuilding the Nation: An investigation into Culture, Space and Commemoration in Buenos Aires*. Her research interests lie in the interface between cultural policies, political economy, and urban studies. Previously, she completed a Masters in Sociology in Culture and Society (LSE) and a Bachelor in Sociology (UBA). In London, she has worked on urban regeneration research and various community consultation projects, and developed and managed a web-based research database on the cultural and creative industries (City University London, HEFCE funded). In Buenos Aires, Cecilia was a researcher at the Instituto Gino Germani (Sociology of Culture team, 2003-2006), and worked for the Government of the City of Buenos Aires.

Melissa Fernández Arrigoitia is a Sociology PhD candidate at the LSE, where she also completed an MSc in the Gender and Development programme. Her current research focuses on the socio-technical history and community politics of Puerto Rico's public housing, as seen through a gendered lens. More generally, Melissa is interested in the sociology/politics of urban space, displacement and public housing, as well as the links between historical, ethnographic and visual methods. Her academic background is in Philosophy and Women's Studies (Tufts University), and she has worked internationally with a number of organisations focusing on the rights of women in the developing world.

David Frisby is Emeritus. Professor in Sociology and the Cities Programme at the LSE. He has published extensively on urban modernity. His publications include *Cityscapes of Modernity* (Polity Press 2001), and *Metropolis Berlin 1890-1940*, (University of California Press, forthcoming), edited with Iain Boyd Whyte. He is currently completing *Contesting Modernity: Otto Wagner's Vienna* (University of Minnesota).

Gerald Frug is the Louis D. Brandeis Professor of Law at Harvard Law School. His specialty is local government law. Educated at the University of California at Berkeley and Harvard Law School, he worked as Special Assistant to the Chairman of the Equal Employment Opportunity Commission and as Health Services Administrator of the City of New York. He is the author of dozens of articles on local government, a casebook on local government law, and two books: *City Bound: How States Stifle Urban Innovation* (2008, with David Barron) and *City Making: Building Communities without Building Walls* (1999).

Gunter Gassner graduated in architecture at the Academy of Fine Arts, Vienna and has worked as an architect for F451 Arquitectura in Barcelona and for Foreign Office Architects (FOA) in London. He has worked as an urban researcher on comparative analyses of public spaces in Europe (as sponsored by Kohn Pedersen Fox Associates) and is currently Associate Lecturer at the University of the Arts London, Central Saint Martins. His PhD research is based at the LSE's Cities Programme and focuses on professional skyline discourses relating to the City of London.

Suzanne Hall is an architect and urban ethnographer, and has a PhD in Sociology/Cities. Her research interests include ordinary spaces, everyday practices, and social and political forms of inclusion and exclusion. She is a Fellow in the Cities Programme at the LSE, and has taught in the architecture and urbanism schools at Cambridge University and the University of Cape Town. Recent publications include: 'Walworth Road – World Intersections: Moving, Pausing and Stopping on a Multi-ethnic Street', in S. Dobson, A. Rooke and P. Halliday (eds), *Studying the City: Methodology, Experience and Politics*, (Palgrave Macmillan, forthcoming).

Tad Hirsch is Senior Research Scientist with Intel's People and Practices Research group, where his work focuses on relationships between sustainability, cities, and new technology. Tad previously studied activist communications technologies at the MIT Media Laboratory, taught digital media design at the Rhode Island School of Design, and designed user interfaces for robots and wearable computers at Carnegie Mellon University. Tad is also a frequent collaborator with the Institute for Applied Autonomy. He holds PhD and Masters degrees from MIT and a Masters in Design from Carnegie Mellon.

Olivia Muñoz-Rojas teaches in the Department of Sociology at the LSE. She holds a PhD in Sociology/Cities from the same institution, and is currently preparing a book on wartime destruction and post-war reconstruction in the Spanish Civil War and its aftermath for Sussex Academic Press. Her recent publications on the topic of urban destruction and rebuilding include: 'Falangist visions of a neo-imperial Madrid' in *Journal of War and Culture Studies*; and 'Heritage protection and reconstruction during and after the Spanish Civil War: Lessons from the First World War, lessons for the Second World War' in *The Venice Charter Revisited: Modernism & Conservation in the Postwar World*.

Ninad Pandit is a doctoral student at the Department of History at Princeton University, where he works on nineteenth and twentieth-century scholarship on ancient India, particularly in the fields of Archaeology. He was a Masters student at the Department of Urban Studies and Planning at MIT, and has studied, practised and taught architecture in Mumbai.

Nida Rehman is a Masters graduate in Architecture and Urbanism (MIT), and studied Architecture at Cornell University. She has practised and taught architecture in the US and Pakistan. She is currently working with the Boston and Brussels based practice ORG.

Laura Lee Schmidt is a Masters student of Architectural Studies at MIT, where she is currently researching medieval Islamic automata manuscripts and theories of conservation and reconstruction. She is assistant editor for the *Platypus Review*, a critical forum for writing on the history and current state of the political Left.

Torsten Schroeder is a PhD candidate in the Cities Programme at LSE. His research explores how practices of architectural production are strategic sites for addressing the challenges of climate change. He focuses on design and the production of architecture as forms of science in practice through researching building technologies, and the questions of responsibility, efficiency, as well as aesthetics. Torsten has worked as an architect and project leader for the Office for Metropolitan Architecture (OMA) in Rotterdam and Beijing. Torsten is an Associate Lecturer at the London Central Saint Martins College of Art and Design.

Susanne Seitinger is a PhD student in Professor William J. Mitchell's Smart Cities group at the MIT Media Laboratory, where she also completed her Masters in 2006, on children's animated playground props. She is interested in the benefits of thinking holistically about urban development and new technologies. Her current research focuses on urban public spaces and lighting systems. Susanne's background is in urban planning (Master in City Planning, MIT) and architecture (Bachelor of Arts in Architecture, Princeton University).

Richard Sennett writes about cities, labour and culture. He teaches sociology at New York University, and at the London School of Economics. In addition to these academic homes, he maintains connections to MIT and to Trinity College, Cambridge University.

Orkan Telhan is an interdisciplinary artist, designer and researcher at MIT's Design Laboratory, where he is working towards his PhD in Design and Computation. His research and practice focuses on the design of interrogative objects, interfaces and media, and engages with critical issues in social, cultural and environmental responsibility.

Fran Tonkiss is a Reader in Sociology, and Director of the Cities Programme. Her research and teaching is in the fields of urban and economic sociology. Her research focuses on urban development and gentrification, economic and spatial restructuring, urban economies and governance, markets, trust and social capital. Publications in these fields include: *Space, the City and Social Theory* (Polity 2005); and *Contemporary Economic Sociology: Globalisation, Production, Inequality* (Routledge 2006). She is the co-author of *Market Society: Markets and Modern Social Theory* (Polity 2001, with Don Slater), and co-editor of *Trust and Civil Society* (Macmillan 2000, with Andrew Passey).

Introduction: The Writing Cities Collaboration

Suzanne Hall, Melissa Fernández Arrigoitia and Cecilia Dinardi

What does it mean for researchers to explore the city collaboratively? In this Writing Cities collection of essays, our collaborative project spawned variety: learning through the shared process of critical review, discussion and debate tended to foreground the differences in the disciplinary and cultural backgrounds of the authors, and emphasise the diverse ways of looking at and writing about the city. The use of collaboration is the emergence of a shared space for graduate students in sociology, architecture, planning, media studies and law to test ideas and approaches to exploring and representing the city. In the context of the Writing Cities project, collaboration provides a transatlantic forum for discussion and debate, sustained by workshop and internet exchanges that expand ways of revealing the city.

The idea behind the Writing Cities Workshop, initiated by Richard Sennett in 2008, was that the challenge of writing the city is dependent on a creative process of 'airing' views, beyond the boundaries of academic institutions and disciplinary terrains. A loose collegial association has formed out of ongoing interactions between graduate students from the London School of Economics and Political Science, the Department of Urban Studies and Planning at the Massachusetts Institute of Technology, MIT Media LAB, Harvard Graduate School of Design, and Harvard Law School.

We sent out our call for papers for the Writing Cities Workshop 2009 around an intentionally broad question: *How do views shape words, how do words shape cities?* Only two aspects provided a frame to the loose subject: the context of the city; and the process of looking and writing. The workshop, held over two days in London, provided the forum for presentation and discussion. But unlike the usual conference format, where the author of the paper formally delivers her paper, and the audience then directs questions to the author, the workshop reverses this convention. Authors are given a paper other than their own to present, requiring one author to summarise another author's research, and to then raise questions for all of those in the workshop to respond to. This process opens up exchange amongst the workshop participants, and tasks each participant to develop a critical and directive approach to all of the papers explored.

This process of shared critical engagement is taken further during the review and redrafting of papers. Participants are required to reconsider their own papers in light of the workshop discussions, and to rewrite them for peer and faculty reviews. Writing is refined through an iterative process, where each participant is simultaneously writer, reader and reviewer. The writing thus emerges as a collaborative endeavour: from the individual workspaces of respective authors, to the face-to-face interactions in the workshop, and the long-distance exchanges afforded by the internet.

Writing Cities, volume 1

The writing which this volume brings together is as multifaceted as are its objects of investigation. Ranging from theoretical or design-based perspectives to historical and politically charged foci, the chapters reflect an amalgam of concerns with the social, visual, political and material aspects of developed and developing cities. While all share a passion for cities and incorporate the use of visual material as either objects of investigation or illustrative accompaniments to textual or ethnographic analyses, the mixed methodologies and theoretical paradigms employed reflect a wider academic trend towards a critical cross-breeding of disciplines for a more expansive, and arguably more inclusive, conceptualisation of the urban. The chapters reveal the city through the lenses offered by different fields, and speak to the multiple sites involved in the production, contestation and experiences of urban spaces. Each chapter offers explorations of the spatial and temporal scales of urban transformations, centring on the authoritative and oppositional acts that simultaneously make the city. In this sense, there is an inclination towards analysing representations of urban change, and the ways in which transformations are reflected in the fabric of city space and life. The authors address the politics and experience of urban change by travelling imaginatively between the past and the present, the abstract and the specific, the global and the local, the human and the material, and the social and the technological. In their creative engagements with the many textures of 'the city', they suggest the need for us, as readers, to pause, revise, and re-envision our own sense of urban forms and futures.

Undoubtedly, the diversity of topics and methodological orientations that emerged from the original call for papers was the greatest strength of this collaborative project. In keeping with the encompassing spirit of the workshop and its focus on the links between writing and urban research practices, this collection sought to expose and disseminate the work of emerging scholars without reducing their strands of inquiry into restrictive categories. As editors responsible for the ultimate sorting and arrangement of chapters, one of our concerns was to format the book in a way that respected and reflected the critical virtues of variety. Aware of how organisational formulations can easily reproduce dominant frameworks of knowledge, we have sought to use the arrangement of the chapters as a tool through which to challenge them. Specifically, there was cause to highlight the individual and collective power of the contributions as *difference*, while also acknowledging the broad and provocative connections that surface through them. After debating the possibilities and limitations of various layouts, we arranged the collection of essays into four sections that responded to the overarching frameworks that appeared in the writers' approaches to the urban. These are: *Writing politics through motifs*; *Writing history through artefacts*; *Writing culture through technologies*; and *Writing visions through images*. While the groupings collate thematic commonalities, the juxtaposition of individual papers and sections evokes the contrasts that lie within and between them, where tensions and dialogues in the themes render their differences productive. By embracing the myriad of links produced by reading and writing cities differently, we aim to resist tendencies towards fixing reality or subsuming differences in any straightforward manner, a task which – as the content of these chapters demonstrates – is both impossible and undesirable for contemporary urban scholars to undertake.

I. Writing politics through motifs

Throughout history, cities have performed various symbolic functions: from standing for whole nation-states, and encapsulating modernity and progress in their cultural offer and labour markets; to representing realms of political status, reinforcing the power of political and administrative structures. In

this regard, **Olivia Muñoz-Rojas'** theoretical review of the political and analytic role of the metonym focuses on the evocative role of the city as a powerful imaginary device. In her analysis of the metonymic affect embedded in Barcelona, Madrid and Bilbao during and after the Spanish Civil War, she highlights the two-fold metonymical framework of writing about the politics of the city as a whole. Muñoz-Rojas expands on the analytic value of the metonym, where cities can simultaneously illustrate broader political and ideological processes, and represent political ambition through the way specific sites, spaces and objects are made within them.

Gina Badger writes about another city politics, focusing upon the articulation between language and lived experiences. She examines grassroots participation in public space through an analysis of the use of military metaphors in guerrilla urban gardening in the United States. The appropriation of militaristic vocabulary in the act of publicly intervening in the city is best exemplified by the use of 'seed bombs' as 'weapons'. Urban ecology becomes politicised through the practice of actively engaging in gardening as politics. This politics, she argues, contributes to the anti-capitalist social justice struggle where metaphors or 'war-fair' motifs are conscripted to foster social change.

Juliet Davis also emphasises links between symbolic rhetoric and urban politics by focusing on how the language of new 'community' policy has become part of the lived and highly contested context of regeneration within East London's Olympic site. Her research highlights the clashes, contrasts and contradictions that emerge when two very different tools - 'consultation' and 'compulsory purchase order' - are promoted in unison by government and private agencies to facilitate the delivery of 'sustainable communities' within the time-frame required to deliver the Olympics project. Through interview material, Davis shows how the narrow conceptualisation of 'community' has impacted on the ways the consultation process has been understood and carried out with various interest groups. When analysing current processes of large-scale urban transformation, Davis's study suggests that a more fine-grained approach to understanding the complexities of existing communities may provide a more

appropriate avenue to grasp how the popular catch-word- 'sustainability'- might be put into practice.

II. Writing history through artefacts

Cities can also be read and written from the visual and tangible dimensions of their urban artefacts. Buildings, monuments, gardens, streets and canals shape and are shaped by the city's landscape and people, and both its sites and objects provide material territory to analyse the value systems of authority and power that shape cities. Since urban objects represent the city's heritage, while encompassing a variety of uses and a plurality of meanings, the transformations of urban artefacts in the face of change often entails contestation. In her examination of an iconic listed building in Buenos Aires, **Cecilia Dinardi** focuses on the city's material culture to highlight its significance in revealing broader relationships with the constitution of the city and the nation as a whole. Dinardi foregrounds the Post and Telecommunications Palace as an object of research and emphasises the methodological potential of using urban structures as a medium of investigation that, on closer inspection, elicits overlapping layers of history, politics, and social life. Through narratives of the building's fragmented architectural trajectory, she exposes some of the larger reverberations of the national construction of modernity, anchored on the manipulation of culture as a political and now also, economic tool for urban reconfiguration.

As **Ninad Pandit** and **Laura Lee Schmidt's** paper shows, the processes of conserving the city's heritage are underscored by complex value systems contained within physical boundaries of conservation sites, as well disciplinary boundaries of conservation practice. Their analysis of a Mughal Pavilion in Delhi reveals ways in which meaning is recreated by restoration practices in the face of redevelopment threats. Through their own *in situ* experience they reveal the conservation of the Mughal Pavilion through the accidental discovery of, 'a structure of no particular archaeological significance', its subsequent restoration, and the acquisition of special significance status. The emphasis on the centrality of landscape in imbuing urban forms with meaning, and with a particular value-laden sense of the past, is also suggested by **Nida Rehman** in her analysis of the city of Lahore in Pakistan. By examining how colonial imaginaries exploit notions of decay to justify the need for physical and social transformation during the nineteenth century, she focuses on the role of landscape, and specifically of Lahore's canal, as an active agent in 'irrigating' the transformations of the city's form. The notion of the garden as a metaphor for sanitation and then for beautification, she argues, proved key to the building of a 'city of gardens' narrative, shaping both colonial and contemporary planning rhetoric in Lahore.

III. Writing culture through technologies

Technology has always been central to the way cities are constructed and how they operate. Technologies mediate our interactions with the city and, increasingly, between urban citizens. **Susanne Seitinger** and **Tad Hirsch** approach urban technologies by extending an interest in the material objects found within cities, to how urban infrastructure is shaped by citizens. They argue that the technological interventions of do-it-yourself enthusiasts, activists and artists can be analysed as both active and representative modes of 'writing the city'. Those groups' various engagements with the taken-for-granted infrastructure of cities (the physical mechanisms that allow our everyday lives to carry on in what seems to be a seamless fashion) 'write' the city not only by imprinting physical marks upon the urban places, but also by making certain counter-cultural perspectives more public. Seitinger and Hirsch insist on the physical and political transformations that are made possible by using urban resources with a heightened material awareness or consciousness: 'an orientation towards infrastructure [...] as a shaper of experience, and as a potential site of action'. Their focus on the 'radical' technologies developed by citizens is centred on the conviction that the creative practices of grassroots actors leads to the democratising potential of active engagement with technology and hands-on knowledge production.

Lara Belkind similarly emphasises the power of technologies in affecting urban change, yet given her particular focus on the interactions between virtual and urban space, she suggests that 'knowledge is not always equal to power'- a statement which provides a different angle to Seitinger and Hirsch's analysis of the democratising potential of technological knowledge. In her analysis of the impact of Lockhard Steele's weblog on the processes of neighbourhood change and urban renewal in New York's Lower East Side, she argues that the 'place narratives' generated by the website act as both a reflection and representation of changes in the neighbourhood. Belkind's research suggests that reading and writing about such web logs can offer an avenue through which to glean the contemporary productions of place. Moreover, by lying at the virtual threshold between local and global mechanisms of capital accumulation and the value creation of 'niche markets', web logs extend the notion of 'the local' to include online communities which then transform into social networks with power over physical space. The economies of digital spaces can be understood as having agency, through their writers, in producing, rather than just recording gentrification, thereby stressing the tensions and contradictions embedded in the proclaimed democracy of digital space.

Orkan Telhan writes about technology and the city through new data sets that are made available through real time mobile sensors. Rather than showing this data to be scientific and objective, Telhan interrogates how technical data is tempered through the processing and verification of information by institutions with vested interests. By introducing the case study of Ankara, Telhan evokes for the reader the day-to-day experiences of accessing data regarding air quality measures and pollution effects. By contrasting the voice of an individual persona, with the official voice distributed over the television and the mobile phone, he reveals the complexity of how institutions and individuals interpret data.

IV. Writing visions through images

The two papers in this section use images of the city in very different ways: one analyses visions of urban futures and how societal and urban conflicts are played out in pictures; the other forms images as a way of highlighting contrasts between skyline discourse in London, and how individuals experience the city 'as a whole'. **Torsten Schroeder** writes about climate change and projected urban futures through reading selected pictures of the city. At the outset, Schroeder presents a set of visual representations of future scenarios of cities, imagined and constructed by an architect, a global corporation and a contemporary magazine. The use of aesthetics in constructing a portrayal of environmental efficiency is further developed through an analysis of architectural drawings produced by Foster and Partners Architects for the Greater London Authority Headquarters. Schroeder points to the boundary of these images, and the extent to which contextual information is edited out in the process of producing images that are selectively representative of technical efficiency.

Gunter Gassner explores the contemporary and historic fascination with representing the city as a whole. The notion of 'skyline' is contextualised through an historic tracing of the picturesque movement and its relationship with current policies in London that purport to protect historic views of the city from selected standpoints and viewing corridors. In his own process of drawing the city, Gassner shows how the pursuits of 'wholeness' through the skyline leads to an excluding and divisionary language of urban form.

The question of writing the city as explored in this collection of essays, is a question of how to engage with and expand the audience. How to evoke the city, and how to create an interpretive or imaginative space between the writer and reader, is the focus of the roundtable discussion by **David Frisby, Gerald Frug, Richard Sennett** and **Fran Tonkiss**. They talk over the idea of creating a sense of the city and its acute qualities of time and place, through small details. It is these details – an object, a voice, a weblog, an image – that forms the substance of this Writing Cities volume. The authors explore combinations of both conventional and new methodological devices, combining case studies, policy, and archival material, with interviews, images and new media sources. The methods and references that result are arguably broader and more catholic than conventional academic texts. However, all of the essays point to the political pertinence of writing and capturing the city as a vivid terrain: a place of absolute consequence for its past, current and future inhabitants. This collection of essays is a collaborative exploration in how to make these consequences tangible to the reader.

Writing Cities: A Roundtable

David Frisby, Gerald Frug, Richard Sennett and Fran Tonkiss

This roundtable discussion reflects on some of the critical questions posed by the Writing Cities project. How do we conceive of the city? What material or symbolic elements are we most interested in? Is our preoccupation more political or aesthetic in nature? Do we look at the city 'from above' (government, institutions, legal framework) or 'from below' (street life, communities, neighbourhoods)? How do we take these different representations into consideration when we write? What does it mean to be creative when writing about cities? And who do we write for?

Fran: Richard, you wanted to start with some thoughts on description – on the problem of description.

Richard: Well, it's actually a problem that you, David, are very familiar with - which is how, when we read Benjamin, we are not actually seeing an arcade, we're seeing an idea of an arcade to which small bits of actual arcade are attached. And we don't really care about that, because we want to see what the idea is. So that's a representation. A description would be something almost unreadable; that is, something that exactly showed what was there. You would prefer an image: you wouldn't want words to do that work.

David: So the description is something that you would complete imaginatively. The alternative is in fact to do something which is so detailed that it would not inspire any further reflection. That is one of the things about Benjamin; whatever it is he has to say about the arcades is in some sense incomplete, but we as people who are interested in the arcades and the life forms within them are so fascinated by this that it stimulates us...

Richard: ... to imagine what's not there.

David: That's right.

Richard: Well that's a real writing problem, and it's a problem – particularly when you're writing about physical objects – about what it is that you leave out that stimulates your reader to engage. One of the things that I've found about this technique is that people make an error when they think that what they should describe is a sort of big picture and leave others to fill in the detail; it should in a way be just the other way around to provoke this kind of imaginative engagement. You find it's the details that provoke someone to say, well what's this about, what's it for, why? And then you've engaged the reader, not only in an imaginative process but in a dialogue with you. I'm going to go back to Benjamin: when he describes crowds, he describes the pressure of the city - and you're there, as a reader. What I'd say about this is that it's a real craft, and for me this editing function - about taking out something significant - is a real skill, rather than sort of describing the big picture.

Gerald: Can I interject law into this discussion? I'm teaching a seminar, and the students are working with the law department of the City of New York, and one of their assignments is to write something for the people who work for the City of New York, telling them how to follow the legal structure. But they can't actually say what's in the legal structure because it's too complicated: that's the point. They can't understand it if they just quote it, so they have to write it in a way that represents what the law is. They are not giving all the details; they have to make what they say comprehensible.

Fran: I'm struck by what Jerry says about writing on law, because you encounter a similar problem when you're writing about urban design and development policy: how do you write about policy without simply reproducing the texts themselves?

Gerald: The writing I was describing has to be general, but it also has to be detailed. The task is to write instructions to the people in the field about how to proceed. Some general conception is not going to do any good; they need to know what to *do*.

Richard: In literary terms this is the contrast between denotation and connotation, and there's something that writers call the 'error of denotation' - which you understand, say, in a recipe: a recipe tells you exactly what to do, how much to put in. You're not actually exercising any judgement, because everything is denoted, whereas connotation occurs in the recipe when you have to press the chicken to see if the flesh is *yielding*. The word 'yielding' implies that you have to think about the flesh you're pressing.

Gerald: There are moments for both of these modes.

David: I want to go back to what Richard was saying about Benjamin, and to introduce another dimension. It seems to me that when we are reading Benjamin - and let's stay with the crowd for the moment - there are three 'crowds' present: one is the abstract crowd of people who are out on the street, and they see something happening, and they're looking; there is a crowd of consumers, people who consume things in department stores, consume images, and so on; and thirdly, there is the crowd as social movement, which is the political dimension. And the political dimension is not the one that comes to the fore, but it is present in Benjamin, so there is always this connection between people walking around in the arcade and some other project that is not brought out - it remains fragmentary - but is nonetheless significant.

Gerald: This is very helpful in terms of one of the questions that you put forward which is 'What is the city?' Each of these crowds is appealed to: there is a consumer side in which the city is just some kind of consumer experience; there is a social movement concept, when we're organising as a city, against something; sometimes it's just a mass. Each seems to have political connotations, each being the referent when we think of who's there. One example is Tiebout's concept of the 'consumer-voter'.

Fran: This image of the city is a very sociological or even legal one, as it imagines the city as a set of relationships between actors and the institutions that govern them. But if we were to think about the city in terms of its physicality - its spaces and its buildings - then what's the relationship of description to documentation? This is the other word that I was thinking of when Richard began with description: there is also a documentary function of social and spatial and legal research.

David: There is a very simple documentation that emerged, for instance, in late-nineteenth century Germany when they were looking at the massive increase of urbanisation in Berlin, but also Leipzig and a range of cities, and it was decided that the *city* had to have a population of 100,000 and a world city - a real *metropolis* - had a million; with the result that Berlin was the metropolis and Hamburg, which had 900,000, remained a mere city. In a sense that's very concrete, because it is based on a precise number, but it is a totally abstract conception of what constitutes a city.

Fran: And now we have the idea of the 'mega-city' as having ten million or more.

David: Right. So you accentuate that documentary evidence with all these numbers, then you have all these major cities publishing statistical yearbooks annually that are over a thousand pages of detail of everything that is happening in that city - what they are producing, how many are unemployed, how many professors there are at university, etc. It's as if you start out with this very abstract conception of the city, and then you have to fill it in with

all this detail, but the detail itself is also abstracted and it finishes up as a hefty document which is the city. And which of course leaves out of account all the other things one wants to know as a sociologist.

Richard: I was thinking a different response to Fran's question, which has to do with this phrase 'spatial narrative', about the physical the experience of being in a city. What are the narrative techniques that a writer uses to convey the experience of time, in walking through the city? When I wrote *The Conscience of the Eye* I tried to make a description of walking from Greenwich Village up to Grand Central Station along Lexington Avenue to convey the narrative of spatial difference as you move through the same physical space but through so many different social territories. What I realised about the narrative process is that it's not building up the way a plot builds up; so that as you get closer and closer to Grand Central and farther and farther away from the Village, you feel that more and more meaning is accumulating as you pass through territory. You're accumulating experience; you haven't actually experienced a sequential narrative. And the practical problem is how to make a reader stay with you for ten, twenty pages, because there's no plot structure.

Fran: In design language, this is 'serial vision'.

Richard: That's right. But it's a terrible writing challenge. That's the part of *The Conscience of the Eye* that I worked the hardest on.

Fran: To *describe* this journey?

Richard: No, to make the reader sense that even though these spaces have no narrative connection to plot, that one didn't lead to the other, that nonetheless this spatial narrative is something that unfolded - just to hold the reader's attention, to make it vivid. And the techniques you have to use to do this. Take the same elements: the size of the shop windows - like now it's changed, and yet again. But it is a problem in serial narration which is a tricky one.

Gerald: This is super important it seems to me. My students have two different visual images: one called the city and one called the suburb. The city is either mid-town Manhattan - tall buildings - or the Lower East Side in 1900. The suburb is a single-family house surrounded by lawn. Even New York City doesn't follow these rules, and in the suburbs you don't have to walk very far to find that they don't look like this either. There are single-family

houses with lawns in both places, and there are tall buildings in both places too. New York includes Queens to Staten Island, and the suburbs have giant office parks and malls, factories and high-rise buildings. So when walking - and walking can be hard in some of these places - one sees a lot of variety.

Richard: Well this in a way is the genius of Benjamin - I mean the notion of taking a 'passage': the passage as a connected flow. There isn't much description of particular arcades, is there, in *Arcades*?

David: No, and in fact Benjamin was indebted for his description of the interiors to Louis Aragon, *Le Paysan de Paris*, and Breton's *Nadja*, and these were the two main sources - he wrote to someone saying, 'I'm staying up all night reading Aragon'. Of course Aragon has this wonderful surrealistic account of the Passage de l'Opéra in decline just before it was to be demolished, and it's this exotic world of strange things, bits of people, prosthetic knees from the First World War, this sort of stuff. So he's relying quite heavily on this other set of descriptors, if you like, for what is inside the arcade. But the other thing that he wants to get across is his notion that, on the one hand the arcade is a structure, so it seems to be stable, but on the other hand it is a *passage* - people are going through it all the time - so it has a dynamism that you don't necessarily expect of a static structure.

Fran: So this is a record that *writing* about cities - and this particular bit of a city - gives us that is not accessible from a photographic record.

Gerald: I was going to raise this: Ed Ruscha has a famous series of photographs, every building on Sunset Strip, one after the other. So how does that fit in? What does that tell us?

Richard: Would you say it's a narrative?

Gerald: I don't know that it's a narrative. There's so much left out: he takes one photograph at a time, one of each building, and then he puts them in a strip. Then it's over, that's it, thank you. Does that describe? There are no people in any of these photographs, just buildings.

Richard: But would you say, does it narrate?

Gerald: No - if narrate is some story, then no.

Richard: It doesn't move you along the line of the photographs?

Gerald: It does move you along the line of the photographs in the sense that these are the buildings you'd see if you walked by them. Only you couldn't really see them then: you'd be too close if you walked by them. So actually in the photograph you're standing in another spot.

David: There is another photographic example that I think is documenting something. As you know, Baron Haussman employed Charles Marville to photograph every building that was being knocked down in Paris in the 1860s, so equally you would have on the wall literally hundreds of Marville's photographs, which is not a narrative but is a documentation of something which has already disappeared. So again, in what looks like something static, which is all these photographs of buildings to be demolished, there is lurking behind this static element the dynamism of destruction.

Gerald: But also, for me, these photographs are a longing for these buildings. It's a narrative for me. The Marville photographs are taken at a moment when you know the buildings are going; this is their final moment. The Atget photographs of Paris are recording the past too, although he didn't know how long the buildings would last.

Fran: And Benjamin of course writes about Atget, how the physical trace comes to stand for the whole city. The empty restaurant table, for example, the bit of balustrade, the stairway, the quai...

Richard: That raises a whole other issue, which is how do you arouse memory traces - the memory trace of a vanished object. As a technique it's really difficult. For instance, when Proust describes the building the Guermantes live in - is it on the rue de Varenne? - he is describing a building that is no longer there. And this is part of the attraction of writing on cities: the act of emotionally reconstructing it. You have to take something that the reader that can identify with from her current experience, and then make it strange. The *pissoir*: in Céline there is a wonderful description of the old pissoirs of Paris in which people are hanging around, children are being toilet trained - everybody knows what a toilet is like, but he's very clever to evoke these pissoirs from fifty years before. So gradually this kind of smelly, stinking object

acquires this nostalgia - he's taken something you know about and has taken it back to an experience you don't.

David: But what it also brings out is something that we don't look at anymore - we don't look at the old pissoirs because they're gone. But what people *were* looking at and that *did* appear all the time was the street furniture. So the street furniture is described as part of the diary of the street - the *Litfasssäule*, the round column which is in the big cities - in Berlin and Paris - is not only for advertisements for the circus and so on: it's where people are also leaving little notes. Their lives become intricately bound up with this world of things, with things in the street. So of course you then get people like Benjamin or Franz Hessel saying that, when we want to read the street, we've got to read these things. These are part of what we have to read - and Benjamin and someone like Hessel then go away and *write* this experience of being in the street.

Richard: There are practical issues in urban design where what people really care about, what they focus on, are these details - like street furniture. If you ask a fifteen-year-old what's the greatest thing about the South Bank, they'd say the skate park underneath. That's I think what the writer is recovering - that detail that the architect probably doesn't think about so much.

Fran: But why do these small details or traces evoke that kind of longing, as Jerry describes - invoke or connote the image of the city - while the skyscraper as an image of the city or the single-family home as an image of the suburb seem crude? Is it a kind of nostalgia for the small or the incidental or the unremarked? They are no more the city than the skyscraper is. Both stand for the city in our imagination.

Gerald: I would say about the tall buildings in New York and the single-family home in the suburbs: I basically don't notice them, because I don't look. They're just there. I walk around New York, I don't see them. And in the suburbs you're driving at sixty miles an hour, you don't see anything. But the details are something that evokes a memory, some place you've been. I might not have noticed it at the time, but when I see it - or read about it - I will notice it *now*. And then it's more powerful, right? If someone shows me a picture of the Empire State Building, I don't think anything of it.

Fran: The Empire State Building is impersonal in a way that your relationship to these unremarkable things is not.

Gerald: Yes, and a lot of photography is about that specificity.

Richard: I think it's a fundamental problem, or mark of expression: in writing a novel, if we tell the reader exactly what it means, then it's a novel we won't spend much time with; whereas if there's a significant detail that we can deduce a bigger meaning from, we're going to stay with it, and maybe that's no different from people's everyday experience of place - that the design is an object of certain emotional indifference.

Fran: I was thinking, right at the start of this exchange on description, of the work of Robbe-Grillet, and these objective descriptions of space, which are lyrical – which become lyrical – although they simply *describe*, in this meticulous documentary manner, the distribution of space in a house, for example. That's pushing the documentary logic of writing to such an end that it becomes something expressive.

Richard: One of the things I've noticed in architects and visual people in general, when they write, which is a kind of adjective and adverb mistake, where you look for the absolutely right adjective or adverb. An exercise I've made students do is to write five pages without any adjectives or adverbs. Try it sometime: it's a way to go insane, but it means that you're just thinking about the way this sentence has to drive into the next one - because you have no colour, and in particular the verbs have to do all the work of characterisation. And you know the architect's prose: 'the autochthonous metamorphosis of the interior' – as if the autochthonous is somehow going to arouse you to see what this is. It's a sort of layering with adjective and adverbs and it's very difficult to make someone see something with that.

David: Do you start looking for other things, for example the rhythm of the writing – things speed up, things slow down. So you're losing something, but you're gaining something else.

Richard: Well speed is a very important category for all writing and that's also one of the points of this exercise: every coloration of adjective or adverb *slows*.

Gerald: You and I have experienced a weird thing about architectural writing, which is that it tends not to be about architecture, but about social science. And so you feel like saying, 'would you just talk about the visual? I'm willing to give you your adjectives and adverbs'. And their answer to that is 'No. I don't want to do that, I want to talk about the economic structure, let

somebody else talk about the visual.' So I don't know what that's a flight from.

Richard: Who are your favourite architecture writers? Who do you most like to read?

Gerald: I'm not sure I have an answer to that. Do you have an answer for that?

Richard: I'm trying to think. I love reading Roland Barthes, because he's so playful.

Fran: I would never think of him as an architectural writer.

Richard: He's written wonderful things on buildings.

Gerald: Of course he has, but it's not writing by an architect.

Richard: Oh I'd never read what architects write.

Gerald: You're supposed to say Koolhaas, or something like that.

Richard: No I never read them, even with him.

Gerald: And why? How does that happen, this kind of writing on cities? People whose architecture one likes?

Richard: Maybe the reason for that is they're trying to explain what they're doing, and that's not something that you really want to read. But there is a need for a kind of criticism and an engagement with visual things.

Gerald: What I associate you with is saying this sentence: 'Could you describe this in such a way that somebody not interested in the details would be interested?' A lot of people write and really want to get the details right. But they should ask themselves: what is this *about* so that somebody in another discipline might be interested? Now how do you do that?

Richard: Well I'd re-phrase it a little, I'd say to somebody: you

know, I've never been to Sofia, I don't know the city at all. Do I want to go there? Is there anything interesting? What you're dealing with is arousing – and it goes back to this whole question of documentation – nobody is going to see a place they don't know, by your documenting it, and when we get these dissertations which are full of exact descriptions; well, that's nice, but what does it matter? If I'm Korean and I've never been to Buenos Aires, the writer's task is – not selling it – but somehow...

Gerald: Or - if you go back to the *Conscience of the Eye* chapter – go and do that in Seoul.

Fran: I think this helps me think about the kind of architectural writing I like because when I think of cities I don't think of buildings and I don't think of architecture, so the writers that I prefer to read are writing about urbanism, not about architecture. So Lewis Mumford, of course still stands up. But I respond to often quite journalistic writing; so you read Benjamin on his various city essays, or Joseph Roth on the southern French cities, and you may want to go there - you may want to go there in 1930 - but it does give you a place that you don't know, not in terms of descriptions of buildings, but descriptions of an urban scene.

Richard: Do you mean that travel writing – really great travel writing – is what writing about cities ought to look like?

Fran: I think of Robert Byron on the cities of Iran and Afghanistan. I've seen some of the places he went to in Iran, I haven't seen any of the places he went to in Afghanistan – but his descriptions of the buildings are exquisite. They're not always correct, but they're pretty good, and you can go and stand in that place and read the descriptions and there is a verisimilitude: although it's expressive, it's recording.

Gerald: What about urban history in your list?

David: One thing I've re-read is Reyner Banham in Los Angeles, the ecologies of the city - and he couldn't drive a car: a guy who can't drive a car goes to this city. But he integrates architecture into what is remarkable about this urban fabric called Los Angeles. Another example is Pamuk's book on Istanbul. I was actually in Istanbul at the time he was writing about, during his childhood. And it recalled to me the nature of that city. And again he's not an architect, he's not describing buildings in particular, there's no twenty pages on Ayia Sofia – he describes everyday life.

Fran: Of course he toyed with becoming an architect, and he has an essay called 'Why I am not an architect' in his recent collection of essays.

Gerald: Urban history puts you into some city in the way in which Lewis Mumford does. I'm thinking of Tom Sugrue's Detroit, which puts you into Detroit in the 1940s, or Douglas Rae's *City*, which is New Haven in 1910: let's wander around the neighbourhood in 1910, and let's see what it looks like. It's fascinating largely because it's all gone; there are traces of it now, you could find a block, but the neighbourhood in 1910 no longer exists. This is what I like about it, it's very rich in its description of all that.

Richard: What does this suggest about scholarly writing? What we're really talking about in academic terms is that urbanists should think more – and write more – like anthropologists. Is that right?

Fran: You're picking up on this idea of rich description, or thick description.

Richard: In general, the project maybe for Writing Cities is an anthropological project. What I think about urban history is that, when I started doing it, there had been at that point what was a kind of institutional and statistical turn – in the States, embodied by someone called Stephan Thernstrom, in this country by H.J. Dyos – and it was valuable archival work, but it never really got out of the archives. When Thernstrom first started counting people - and he was one of the first to really do a statistical history of the working class in New England, and in those days he was a good socialist - he struggled to document injustice, but what he could not do was a history of the people who lived those statistics. It fell apart as a writing project, because the statistics didn't refer to anybody's experience. This is what I'm saying in proposing that writing cities should be more anthropological.

Gerald: Here's support for your proposition: I once audited a course in the history of immigration at Harvard, co-taught by Bernard Bailyn and Thernstrom, in which the first half was taught by Bailyn, then he disappeared, and the second half was taught by Thernstrom. In the first half I loved every minute of it. Bailyn would start telling these stories and would be laughing at his own stories. Such incredible description. Then he went away and the next day Thernstrom came. I never went back. And why is that? It's something to do with what you call anthropology, but you're going to have to help me out with the distinction between contemporary anthropology and sociology.

Fran: Thinking about this question of urban history, and the kinds of archival resources that historians have had up until now, sometimes very meagre, and the kinds of archival resources that historians are going to have in the future: never mind the decennial census - given these annual accountings of urban life - I do wonder whether there will be too much information to be able to write something that is evocative of the city rather than a reproduction of the archive.

Richard: That is a real problem, but the other archival problem - I tell you what I found when I wrote *Flesh and Stone*, which is this kind of history of the body and the city, was that usually when you get into this kind of archival work that the archivist has had a very prosaic mind. So for instance I wanted to find images of the body politic in the thirteenth century and I spend a lot of time in the British Museum going from one archive to another, and there is a very common kind of image in Europe in that era, and I just wanted to see what it looked like - nobody had it. The idea was that this was a real image that might show up in the archive, but they were classified in very unimaginative ways. What we're doing when we're doing urban studies is breaking out of a mould - it's not architectural history, it's not sociology - you're sort of fighting against the way that the data are organised.

Gerald: I think a lot of that is continuing. You read these papers that say 'the only data that we have is this, and so we're going to analyse these data', and you're thinking, but I don't actually think that's the data we want. Say they want to talk about something using census tracts - and I think: census tracts, whatever: what about the city? And they say, 'well we don't have data about the city, so we're not going to talk about it.' I'm interested in the city, the census tract doesn't exist as a human experience. This is not the kind of data we need.

David: It is much more difficult to do what Henry Mayhew did. No-one said to him, 'Go and tell us what is happening to the poor in London', or 'Who is on the street?' But Mayhew goes out: you read him and he has gone down every street, and he's picking up on what people are doing, on their life stories, on language - the costermongers' slang, and so on. That is a much more difficult activity.

Richard: That's anthropology.

David: Yes, I see him as an early anthropologist, or an urban ethnographer at least.

Richard: I'll give you an example of a difficulty that I'm thinking about. Spiro Kostoff, a wonderful architectural and urban historian, when he was doing his book on cities, he went into what must have been some library in Berkeley and he said 'Give me everything you have on walls.' And the librarian looked at him and said, 'Eh?' And he said, 'Yeah walls - I want everything you have on walls.' And she said, 'What kind of walls?' And he said, 'Any kind of walls. I'll winnow through it, I'll make a collection.' If you think about it, almost any physical aspect of cities has been rendered difficult to get at. I got very interested in doors, in the history of the doors...I could never write it. But for an anthropologist: to get inside and outside of a place, how it's protected and not protected - it's sort of bread-and-butter knowledge.

Fran: I wanted to raise one other point about data, the proliferation of data - and this is something our colleagues at MIT are familiar with - which is the new availability of data that track people's movements. There is a lot of discussion of the potential of these mobile devices, but why is it interesting to be able to document the fact that large amounts of people are concentrated in a certain part of the city at a certain time of day, or that there are bottlenecks here? Because we know that: we already know where crowds form, how traffic jams come about. It's a technological fetish, it seems to me.

David: Which detracts from what I think is a more interesting question: are there fast and slow streets? Not in the sense of - obviously streets change with day and night - but also with what I would call the 'turnover time' of the environment. Not just the structures, but where the buildings are still there but the interior is gone - it now has a different use - or the insistence at the time of the planning of Alexanderplatz in 1929, that the buildings were going to have a turnover time of twenty-five years.

Fran: Well they kind of did.

David: For different reasons, yes they did. All the designs were trying to take into account the notion of speed and the street, the acceleration of life on the street.

Richard: You've opened up a really important point, which is that for writing cities time-geographies are really important, and they're usually missing. That's a great scholarly resource - lots of people do time-geographies but we never think about them as stimulus to this kind of engagement with the anthropology of the city.

Fran: Benjamin has this idea of the figure of the individual in the city as a potential culprit, but it seems that there is a move with these recent methods to electronically tag everyone. This is not how you used to gather time-geographies.

Gerald: Here's a variation on your electronic tag: there's an app you can get on your iPhone where you can – if your friend signs up – show where he is at every moment and where you are at every moment. It would be the last thing that I would want, why would I want anybody to know where I was at every moment? But of course everyone I know who's twenty-three (and I know hundreds of people who are twenty-three) think, 'Of course I want that.' And they have it, and they're very excited about it, and they don't understand why I won't put it on my phone so that they know where I am all the time.

Richard: Well this is a big culture shift in cities; it used to be that the anonymity of the city was a big part of its draw and its freedom. You're not very anonymous if you all you need to do is go on to your iPhone to see where someone else is. But that's not just about writing about cities, it's about living in them. The notion that you get protection through anonymity is something that is really disappearing in the modern world. The experience of being un-documentable, not succumbing to being a Foucaultian subject. And what you're describing is making yourself the most incredible Foucaultian subject – always identifiable, locatable, and so on.

Fran: You're never lost – and you're never lost to the other.

Gerald: It raises the question of what is the consciousness of the reader, now? Who are these readers that we are speaking to?

Richard: So everything we've been talking about has to do with the 'reader's share' in writing cities. Everything turns on that. You can write anything you want, you can be as boring as you want, if you want to do it, but the reader's share requires this translation into something where somebody wants to know what you've found out, and I guess what we're suggesting is that the only way to do that is in a fairly imaginative way which is representational rather than documentary. So is that knowledge? I think it is.

I. Writing politics through motifs

1. **Cities under Franco: A Metonymical Approach**
Olivia Muñoz-Rojas
2. **Digging, Sowing, Tending, Harvesting: Making War-Fair**
Gina Badger
3. **For Whose Benefit? The Role of Consultation in the Compulsory Purchase of the Site for the 2012 Olympic Games in delivering a 'Sustainable Communities' Legacy**
Juliet Davis

1. Cities under Franco: A Metonymical Approach

Olivia Muñoz-Rojas

In this chapter I will discuss the two-step metonymical concept of the city that I use in my writing on post-war urban reconstruction in the aftermath of the Spanish Civil War¹ in which I focus first on three cities – Barcelona, Madrid and Bilbao – and subsequently three selected sites. This concept suggests that cities can illustrate broader political and ideological transformations affecting the whole (a nation, a region, a political regime), and particular sites within cities can be representative of trends within these cities. I will use my own research on the reconstruction and remaking of cities under Franco (Muñoz-Rojas 2009a) to address the following questions: how much can a city tell us about the nation or the political regime of which it is part; how representative are particular sites within the city of the city as a whole; how do we decide to focus on particular cities or sites and what is the critical potential of a metonymical approach?

I will start by reviewing the concept of metonym in theoretical terms. Second, I will discuss cities as metonyms, centring on capitals as a historical example of how cities may work as metonyms. This will be followed by a succinct examination of the situation of Barcelona, Madrid and Bilbao and their role as political-territorial capitals during and after the Spanish Civil War. Third, I will discuss the second step in the metonymical framework that I am presenting – how we choose specific sites to discuss cities as wholes – before I move on to analyse the sites I selected in the three cities as metonyms for the latter and the Franco regime. In the conclusion, I will evaluate the strength of these metonyms and, ultimately, the usefulness and critical potential of a metonymical approach in this particular research.

Metonyms in theory

Wholes and parts

The concept of metonym (or metonymy), originally from Greek, involves a 'name transfer', that is, using one name or noun to refer to another. In this sense, metonyms are not dissimilar from metaphors, although, in principle, they entail different kinds of processes (Lakoff and Johnson 1980). While a metaphor is a way of conceiving one thing in terms of another, its function

being to improve understanding, metonyms are fundamentally referential: one thing *stands for* another (Lakoff and Johnson 1980). In metaphors, an 'imagined' entity replaces the 'real' entity ('your pearls' for 'your teeth'), while metonyms are based on a 'real' relationship between two names or nouns, often based on proximity or possession: the producer for the product (*Kleenex* for facial tissues); the user for the object (the first violin for the first violin player in an orchestra); the controller for the controlled (George W. Bush for the American people); the place for the event (Waterloo for the battle between French, British, German and Dutch troops in 1815), etc. (Lakoff and Johnson 1980). Particular subcategories of metonyms are synecdoches. These involve using the part to evoke the whole (as in 'it's 15 pounds per head' meaning 'it's 15 pounds per person'). When using a city to refer to the nation as a whole, or an urban site to understand the city as a whole, we are ultimately using a synecdochic concept of the city. However, many authors prefer to subsume the category under the broader one of metonyms for reasons of simplicity, and I will be doing the same in this paper (see Lakoff and Johnson 1980; Thüsen 2005).

Cities can be seen as parts of larger entities such as regions and nations, which can then be considered as wholes. This means potentially that certain characteristics of the region or the nation can be inferred from investigating its cities. The idea is that by considering a particular city, we might be able to discover dimensions of the whole – the region or the nation –, which are not as obvious if we only examine the latter. But there is a second level to this metonymical approach to the city. There are sites and specific places *within* the city that can be seen in a similar way: as distinct parts of the city as a whole. Their investigation will possibly tell us something about the city. I am somehow implying that we can look at the city through a zooming lens so that when we look at it from afar, it becomes part of a larger whole; and when we look closer, it becomes the whole of which districts, neighbourhoods and specific sites are parts. Although quite obvious in many respects, this way of understanding the city can be helpful when trying to situate our different research on cities both analytically and critically. The analytical aim of most urban research – especially case studies – is to examine a

small part of a particular city, or a particular city as a small part of a broader geographical entity, in the hope of finding patterns that transcend that specific part. From a critical perspective, on the other hand, our choice of this city and/or site and not this other one is often not innocent, and anticipates the vision of the whole that we aim to offer. I will come back to this critical dimension of metonyms later.

Cities as metonyms

Capitals

The relationship of capital cities to their territories is possibly one of the most explicit examples of a metonymical relationship in the context that I am discussing. As the physical seats of parliaments, executives and bureaucracies, capitals have been viewed historically as the heads of specific territories (the notion of head being already explicit in the Latin origin of the word capital: *caput* or, literally, head). One need only think of how often expressions such as 'Washington has decided this or that', or 'Paris has approved such and such measures', are used to refer to decisions made by representatives on behalf of the whole nation. This metonymical convention has not only been exploited by the media as an effective means of delivering information, but by political regimes keen to promote centralistic decision-making and administrative systems. If we think back to the referential dimension of metonyms mentioned earlier, capital cities seem indeed to work as spatial and mental reference points. It is not always the case that capital cities are located in the geographical centre of the nation. And yet the fact that transport and communication systems often originate and terminate in capital cities contributes to 'centring' the capital in citizens' spatial imagination, regardless of the actual geographical location of the former. Traditionally, citizens have often been required to travel to the capital if they needed to deal with more complex administrative or legal matters, but also if they wished for increased access to commerce and entertainment. Furthermore, the capital of a country is often the only city outsiders know. It is not a coincidence that enquiring about a given country's capital city is such a popular question in quizzes, as it is generally a

requirement for school children to learn the name of the capitals of most, if not all, the countries in the world. Therefore, capitals in many ways orientate citizens and other cities based on how far from or close to them they are located. The implications of being close to or far away from the capital are manifold, and operate at different levels politically, economically and culturally. In examining the cases of Barcelona, Madrid and Bilbao in the Spanish Civil War and its aftermath, I will briefly address some of them.

Barcelona, Madrid and Bilbao in the Spanish Civil War and its aftermath

Barcelona, Bilbao and Madrid were all capitals of political-territorial entities during the Spanish Civil War (1936-1939).² The formal co-existence of three capitals (and three territorial entities) was unprecedented and significant tensions emerged between the Basque and Catalan nationalist administrations and the Republican government in Madrid during the war. Until they were seized by the rebels in June 1937 and January 1939, Bilbao and Barcelona more or less systematically complained about not receiving adequate military and material support from the Republican government to face the challenges posed by the aerial bombings and incoming waves of refugees from the rest of Spain. The two capitals shared the ambiguous sense of being deprived from their capacity to act autonomously and abandoned to an uncertain fate: while they had to take military orders from Madrid, they were not sent sufficient supplies to resist the bombings and accommodate refugees. From the Republican government's perspective, the tangle of radical political parties and unions in Catalonia and the conservative religious taint of the Basque nationalists posed serious challenges to the political unity of the Republican side in the war. Also, Madrid had been besieged by the rebels as early as winter 1936, and occupied most of the Republican government's political and military activity on the assumption that if the capital of Spain fell, the war would be over (which happened eventually in April 1939).

The competing position of the three cities as metonyms for distinct political entities ended as soon as the war ended and Franco deprived Catalonia and the Basque Country of their

autonomy. In the new regime's organic, unitary concept of Spain, Barcelona and Bilbao lost their status as political heads. They preserved, nonetheless, their economic position as industrial port cities. Meanwhile, in spite of the city's fierce resistance until the end of the war, or perhaps because of that, Madrid was turned into the absolute *head* [sic] of the New Spain. The regime imposed its reactionary, centralist logic on the city for almost four decades (1939-1975), and soon few people would remember that Madrid had once appeared as a paradigm of anti-fascist resistance to the world.

Metonyms for cities

The kind of organic conceptions of the city that emerged in the nineteenth century, and continued evolving in the first part of the twentieth, assumed that different parts of the city possess distinct characteristics, and, as a result, ought to perform different functions. The analogies between the city and a living being reflect the broader analogy between society and a living organism, which early sociologists, for example, Émile Durkheim used in describing and analysing, but also prescribing, the social order of industrial capitalism (Durkheim 1981). The analogy with the living being also builds on earlier conceptions of the political body such as Thomas Hobbes's compelling image of the *Leviathan*: the powerful sovereign body whose limbs are made up of all the citizens of the nation, and respond to a ruling head, the King, whom they hold accountable at the same time (for a discussion of Hobbes's metaphor, see Panagia 2003).

Some of the implications of viewing the city as a living organism are that cities suddenly exhibit biological behaviours: they grow, they fall ill, they are cured, and they age and die. Starting in nineteenth-century Paris, the hygienists emerged as a diverse group of professionals, ranging clinicians and lawyers, who conceived of the city as a patient affected by numerous diseases, and diagnosed the troubles of the city as if these were medical problems of a human being. As Weiner and Sauter suggest, 'for [these] reformers [...], pollution, congestion, the elimination of waste, and the need for pure food and water became medical issues to be understood through the mental tools and metaphors they had learned in school' (Weiner and Sauter 2003). This was the beginning of the concept of public health.

Sociologist and urbanist Georg Simmel wrote that 'to the adequately trained eye, the *total* beauty, the *total* meaning of the world as a whole radiates from every single point' (cited in Frisby 1992), ultimately implying that the study of even the smallest, or apparently most insignificant phenomenon, practice, object, etc. reveals the structure and workings of society at large. If we apply the same logic to the city, we might conclude that

any district, neighbourhood or even singular building has the potential of illustrating the city as a whole; in other words, it has the potential of becoming a metonym for the city. At the same time, it seems plausible to think that there are parts that can be more illustrative of the city than others depending, for example, on their location, use and relation to the other parts. The situation of a site in these terms varies over time. Hence, we may conclude that different parts can be used more or less effectively as metonyms for a city at different historical moments depending on their situation. Beyond this more objective attempt to identify a metonym for a particular city based on a set of pre-established criteria, the choice of a specific site could also be informed by a critical understanding of the city. For example, we may choose to study the docks and not Westminster because we think that the examination of this traditionally more marginalised part of London will reveal critical and contradictory aspects of the city as a whole. Nonetheless, if we were to follow through Simmel's argument, the same city-image should emerge from the careful observation of either of the two sites.

In the following sections, I will explain how I selected the sites that I investigated in Barcelona, Madrid and Bilbao.

The Barri de la Catedral, the Cuartel de la Montaña and the bridges of Bilbao

My research being on urban wartime destruction and post-war reconstruction and the relationship between the two processes, I looked for parts of Barcelona, Madrid and Bilbao that underwent significant transformations as a direct result of the Spanish Civil War. Furthermore, I tried to identify transformations that had had exceptionally immediate, acute and dramatic effects for the cities' built environment and residents. The three sites that I eventually selected – the Barri de la Catedral, the Cuartel de la Montaña and the bridges of Bilbao – were all well-known in the cities, centrally located and suffered major changes during and after the war. Moreover, these changes had not only practical but symbolic implications, which I was particularly interested in exploring.

The Barri de la Catedral

The neighbourhood that was known as Barri de la Catedral at the heart of old Barcelona was repeatedly bombed during the war, and many of its buildings were in ruins at the end of the conflict in 1939. The first post-war city council decided to turn destruction into an opportunity, and levelled the remains of the neighbourhood. This allowed for the opening of a section of the so-called Avenue C for which plans had existed since the mid-nineteenth century (see Ayuntamiento de Barcelona 1941; Florensa Ferrer 1961). One of the aims of Avenue C – or Avenida de la Catedral as it was now called – was to disencumber this part of old Barcelona, creating a better view of the Cathedral and

other adjacent monuments (see *Actuación Patrimonial* 1949; *Urbanización y Reforma* 1934).

During the works for the Avenue, which took place between the early 1940s and late 1950s, new sections of the Roman military belt were discovered behind the old houses that were once constructed attached to the wall (*Gestión Urbanística* 1954). Their removal brought vast sections of the Roman military belt, including several towers, to the light after centuries. In the context of the Franco regime, the demise of the *Barri de la Catedral* and the disclosure of the ancient city-wall arguably reveal the regime's wish of being identified with the Roman Empire rather than the suburbs that emerged in the Middle Ages outside the ancient fortification and of which the *Barri de la Catedral* had once been part (see, for example, 1944a; M. 1958). Moreover, I argue, highlighting the military origins of old Barcino – the Roman stronghold – allowed the city council to de-emphasise Barcelona's longstanding commercial tradition, very much associated with the presence of Jews in Spain. In the imagination of the new authorities, the *Barri de la Catedral* operated as a metonym for merchant Barcelona while the disclosed remains of the Roman wall were to be seen as a metonym for Roman Spain. Old Barcelona thus came to reflect the Franco regime's problematic relationship to Spain's medieval legacy because of its Moorish and Jewish imprint, but also the regime's overvaluing of Spain's role in the Roman Empire. However, over time, *Avenida de la Catedral* lost these ideological connotations, becoming increasingly a metonym for tourist Barcelona with its vast, open space operating as an unexpected glade amid the forest of narrow, crooked streets of the old city.



Figure 1. Remains of the houses attached to the ancient city. (Arxiu Fotogràfic de Barcelona 1957 (C120-165))

The Cuartel de la Montaña

In Madrid, the military barracks known as *Cuartel de la Montaña* in the western part of the city were seriously affected by the war because of their closeness to the city's main defence line. Three years of air strikes and artillery fire left the building and the entire district of Argüelles, of which the barracks were part, in bad shape (see *Comité de Reforma* 1937-38). The post-war fate of the ruins of the barracks is relevant because it mirrors the dramatic fate of the ambitious post-war plans that the new political regime devised for the capital (Muñoz-Rojas 2009b). Although the discourse of the victors of the Civil War was pre-dominantly anti-urban,³ the new regime made an exception of Madrid. In the Falangist⁴ imagination, Madrid constituted the absolute head of the nation, and deserved special attention. The early post-war plans for Madrid envisioned a neo-imperial capital city, a celebration of Spain's golden past – essentially the Hapsburg Empire of the sixteenth and seventeenth centuries – and included constructing Falange's party headquarters, the *Casa del Partido*, on the ruins of the *Cuartel de la Montaña* (*Comisión Técnica de la Junta de Reconstrucción* 1944). The ruins were located, in turn, on what was now conceived of as the head of the city, the north-western end, where the Falange planned to concentrate the state apparatus. The *Casa del Partido* itself was designed as a massive 70,000-square-metre, five-storey compound, explicitly emulating sixteenth-century architect Juan de Herrera's famous palace the Escorial (Trenas 1943).

However, neither the ambitious plans for a neo-imperial city nor those that envisioned an institutional head within the city, including the Falange's building, materialised in the end.



Figure 2. The fully disencumbered (and now refurbished) wall. (Muñoz-Rojas 2009)

A conjunction of economic and ideological factors worked against the implementation of the regime's early post-war plans, fundamentally the autarchic economic programme that the former embarked upon in 1939, together with the defeat of the Axis powers in 1945. The lack of material resources and Franco's pragmatic distancing from fascism the moment an allied victory seemed plausible appear as convincing explanations to why the projects failed. And yet the swiftness with which the plans for Madrid were abandoned is still remarkable as is the fact that the ruins of the Cuartel were left in neglect for more than three decades until the site was turned into a park, and an ancient Egyptian temple placed in it in 1972 (see Anon 1972; Nieto Alcaide 1980).

In this sense, the ruins of the Cuartel constitute a powerful metonym for the urban development of Madrid under Franco. The protagonist role of the Falange and the influence of the Party's visions of a neo-imperial capital in the early 1940s were replaced increasingly by the role of private redevelopers and the fragmented nature of the latter's economic interests. Despite the approval of planning regulations and the presence of a heavy bureaucracy to implement them, the development of Madrid turned growingly uneven and erratic (see Humanes Bustamante 1986; Moneo 1968). The unpredictable fate of the ruins of the Cuartel poignantly illustrates this growing lack of vision and coordination of urban planning.

The evolution of Madrid as the *head* of the Spanish nation becomes in turn a metonym for the Franco regime itself and the ideological mutations it underwent over time. Falange's plans for the reconstruction of Madrid reflected the early ideals and aspirations of the victors of the war and builders of the New Spain: their attempt to construct a modern fascist state without

giving up the values of the old Spain (associated with Catholicism and a traditional social order). Moreover, the growing ideological fragmentation and tensions between the regime's different factions that ensued in the 1950s is arguably mirrored in the abandonment of the attempt to follow through a consistent, all-encompassing urban plan for the capital city. Finally, the increasing presence in the regime of conservative, managerially oriented bureaucrats from the 1960s can be detected in the growing number of housing complexes and improving infrastructures in Madrid. Unlike Falange's plans, however, these initiatives were not part of a top-down, ideologically informed state building programme.

Bilbao's bridges

Beyond their role as physical connectors between the two sides of a watercourse, bridges have historically been credited with exceptional symbolic value as facilitators of human communication and exchange. In times of war, a city's bridges become priority military targets for the enemy. Destroying a city's bridges is a relatively easy way of preventing residents from carrying on with their lives as usual, and inhibiting troops' mobility. Furthermore, because of the symbolic value of bridges, the impact of their destruction on the psyche of the population can be stronger than when other parts of the city are affected. In many ways, the destroyed bridges become metonyms for the city under attack. Moreover, as the famous case of the old bridge in Mostar in former Yugoslavia demonstrates, it is not only destroyed bridges that might develop into metonyms. The reconstructed bridge in Mostar (completed in 2004) has come to represent the alleged restoration of the harmonious coexistence between Bosnians and Croats in the aftermath of the Balkan conflict. Hence, bridges have the potential of becoming metonyms for the ensuing post-war order too.



Figure 3. Model for Falange's Casa del Partido in Fotos. (Semanaario Gráfico), 24 July 1943. (Unlocated copyright owners)



Figure 4. The ancient Egyptian temple on the site of the ruins of the Cuartel. (Muñoz-Rojas 2007)

On 19 June 1937, the Basque-Republican troops blew up the bridges as they left Bilbao before its imminent seizure by the rebels. I argue that the bridges acquired strong metonymical properties immediately after the city was taken over by the rebels. They were reconstructed while the war went on in other parts of Spain, and became early signallers of the emerging political order of the New Spain. Moreover, the new rebel authorities quickly turned the destruction of the bridges into a powerful propaganda motif, accusing the Basque-Republican troops of having caused unnecessary damage to the city – a consequence, they claimed, of their ‘Red-separatist barbarism’:

A group of subhuman beings [the Basques], primitive barbarous savages, masked behind their supposed love for a non-existent nation; and another group [the Republicans], hypothetical defenders of the privileges of a class, came together on the night of the 18th June, and in an act of criminal frenzy destroyed the bridges, shattering Bilbaoan life (Ayuntamiento de Bilbao 1938).

The reconstruction of the bridges became an unprecedented opportunity for the new city council to mark Bilbao with the stamp of the New Spain. To begin with, the names of the bridges were changed to honour the war and the rebel generals. Furthermore, the homogenous, sober aesthetics of the reconstructed fixed bridges contrasted with the more sinuous appearance of their ‘liberal’ predecessors, indicating, as it were, the triumph of the values of the New Spain – unity, austerity and hierarchy – in Bilbao as a whole (see Fomento 1940). The relatively swift reconstruction of the fixed bridges was also promoted as evidence of the commitment and efficiency of the new political order.

Beyond the reconstruction of the bridges, it was important for the new regime to dispel the image of Bilbao as the seat of the Basque autonomous government during the Spanish Civil

War. Instead, Bilbao’s role as a port-city, along with Bilbaoans’ traditional industriousness were emphasised, but, more importantly, the purportedly Castilian (Spanish) origins of such industriousness were highlighted. Bilbao had its roots in Castile: it was presented as the port of ‘Mother Castile’ (Zuazagoitia 1946). Like Barcelona, Bilbao was now to be viewed as a satellite of the centre. If Madrid was seen as the head of the nation, the formerly Catalan and Basque capitals were conceived as fundamental organs of the Spanish nation, yet inevitably subsumed to the orders and impulses of the head. All Spanish cities shared this secondary, peripheral or subaltern position in relation to Madrid and Spain as a whole. The same way there was only room for one *Generalísimo*, Franco, within the group of leading generals of the regime, there was only room for one capital, Madrid, among Spain’s major cities.

Conclusion

In evaluating metaphors in social theory, Daniel Rigney discusses six aspects that one should take into account when assessing the strength of a metaphor: heuristic potential, adequacy of explication, explanatory power, predictive power, aesthetic value and moral and ideological value (Rigney 2001). The strength of a metaphor thus depends, among other things, on its capacity to produce new discoveries and insights, its being economical and concise (Rigney 2001), its “capacity to generate testable hypotheses or predictions” and its poetic insight [and] elegance (Rigney 2001). Moreover, Rigney suggests, the moral and political consequences – and critical consequences, I would add – of using certain metaphorical models need to be acknowledged always (Rigney 2001). Rigney is also keen to point out that even a ‘weak’ metaphor might be useful in that it forces us to articulate



Figure 5. La Merced and San Francisco bridges. Undated pre-Civil War photograph. (Archivo Foral de Bizkai AL0015-0337)



Figure 6. Reconstructed La Merced and San Francisco bridges. (Muñoz-Rojas 2007)

the grounds of its inadequacy (Rigney 2001). Cities as metonyms and metonyms for cities can be assessed in similar terms. More specifically, we can ask the following questions: Does our metonym reveal new and/or critical aspects of the whole? Is it clearly delimited spatially and temporally? Are we able to predict the development of the whole by considering the development of the specific part that we are investigating? Do its aesthetic or visual qualities contribute to making explicit the relationship that we are trying to establish between the part and the whole?

I suggest that cities under Franco can be analysed as metonyms for the dictatorship, revealing certain features of the regime more strongly and aesthetically compellingly. Although much has been written on the Franco regime, there is significantly less written about the role of cities and city making in the reproduction of the political order of the dictatorship. In this sense, I have argued, for example, the regime's organic understanding of power and its structural principles of hierarchy and service materialised in the dominant position of Madrid as the capital of Spain – the nation's head – and the subaltern positions of Barcelona and Bilbao (former seats of nationalist autonomous governments) in relation to Madrid and Spain as a whole. This hierarchical organic notion worked inside the city as well. In Madrid, the head of the city was identified with the north-western end where the most emblematic institutions of the new state should have been located (while the bowels, or the city centre, in this case, were identified with business and commercial activities). Furthermore, some of the randomness and subtler contradictions of the Franco regime can be read into the three sites that I selected for my research, which hence become metonyms for the cities, but also the regime. If Avenida de la Catedral with its disclosed city-wall could be seen as a metonym for the idealised Roman Barcelona which the regime wished to be identified with; the ruins of the Cuartel de la Montaña could be viewed as a metonym for Madrid and its irregular and unpredictable development; and, finally, the reconstructed bridges of Bilbao could be seen as metonyms for the New Spain as conceived by the early Falange.

How powerful are the metonyms that I have considered – particularly the latter three – bearing in mind the qualities that Rigney proposes for assessing metaphors and the ensuing questions I outline above? Although I do think that all three sites reveal fruitful and critical insights into the development of Barcelona, Bilbao and Madrid under Franco, the case of the ruins of the Cuartel de la Montaña seems to be particularly powerful. There could be several reasons for this. One, because the site was an independent plot, and more clearly delimited spatially than the other two. Another reason could be that I consider a longer period of time in the case of the Cuartel than in the other two, and it could be that, as Kevin Lynch writes, 'the city is [...] a thing perceived only in the course of long spans of time' (Lynch 1960).

Moreover, there is not only a close relationship between the actual and projected transformations that the ruins of the Cuartel underwent and the transformations that Madrid – and the regime – experienced over those years, but this relationship is also visually explicit. The Falange's project for its Party headquarters was a fundamental part of the early plans for a neo-imperial Madrid, and the apparently random outcome of the site corresponds to the unpredictable development of Madrid as a whole in the following decades. Finally, the Franco regime's contradictions, fundamentally the inconsistencies between its discourse and practical initiatives, are critically revealed by the fate of the ruined barracks. Hence, one might conclude preliminarily that city metonyms work best if they constitute spatially independent sites, if they are examined over longer periods of time, bear a visually or aesthetically compelling relationship to the city as a whole, and provide accounts that take into consideration but also challenge established narratives and power structures. This said, more theoretical reflection and empirical work is necessary to develop an increasingly solid metonymical framework for the study of cities.

References

- Anon. (1944) 'La calle de la Paja. Donde la antigüedad está jerarquizada', *Destino*, 22 April
- Anon. (1972) 'Esta tarde se inauguran: Monumento a los caídos del Cuartel de la Montaña y el Templo de Debod', *Arriba*, 20 July
- Actuación Patrimonial/Caja 045962/Expedientes 1185-1186/Año 1949. 'Plano de Reforma y de Urbanización y Enlace de los puntos singulares del Casco-Antiguo de la Ciudad. Memoria. Barcelona, -- de Enero 1930', Barcelona: Arxiu Municipal Administratiu
- Ayuntamiento de Barcelona (1941) *La obra realizada por el primer Ayuntamiento de Barcelona después de la liberación: 26 enero 1939 - 26 enero 1941*, Barcelona: Excmo. Ayuntamiento de Barcelona
- Ayuntamiento de Bilbao (1938) *Nuevos puentes de Bilbao*, Bilbao: Ayuntamiento de Bilbao
- Comisión Técnica de la Junta de Reconstrucción (1944) *Plan General de Ordenación Urbana de Madrid (Plan Bidagor)*, Madrid: Junta de Reconstrucción de Madrid, not paginated. http://www.madrid.org/cs/Satellite?c=CM_InfPractica_FA&cid=1142340797804&idConsejeria=1109266187260&idListConsj=1109265444710&idOrganismo=1109266227503&language=es&pagina=ComunidadMadrid%2FEstructura&pv=1142344831337&sm=1109266100977 [Accessed on 15 January 2010]
- Comité de Reforma, Reconstrucción y Saneamiento de Madrid (1937-38), 'Memoria', Madrid: Comité de Reforma, Reconstrucción y Saneamiento
- Durkheim, É. (1981) *Les règles de la méthode sociologique*, Paris: Quadrige/Presses Universitaires de France
- Florensa Ferrer, A. (1961) *Memorias de la Real Academia de Ciencias y Artes de Barcelona. Cartografía Local. Planos de Reforma Interior de Barcelona*, Vol. XXXIII. Nº 19. Barcelona: Real Academia de Ciencias y Artes de Barcelona
- Fomento Año 1940/Sección XIV/Legajo 332/Número 9, 'Proyectos completos de los cuatro puentes fijos', Bilbao: Archivo Municipal
- Frisby, D. (1992) *Simmel and Since: Essays on Georg's Simmel's Social Theory*, London and New York: Routledge
- Gestión Urbanística/Expediente 3320/Año 1954, 'Excavaciones arqueológicas (cerca de la catedral)', Barcelona: Arxiu Municipal Administratiu
- Humanes Bustamante, A. (1986), *Madrid no construido. Imágenes arquitectónicas de la ciudad prometida*, Madrid: COAM
- Lakoff, G. and Johnson, M. (1980), *Metaphors We Live By*, Chicago: The University of Chicago Press
- Lynch, K. (1960), *The Image of the City*, Cambridge MA: MIT Press
- M. (1958), 'Pulso de la Ciudad. Plaza Nueva y Torres Viejas', *Revista de Actualidades, Artes y Letras*, vol. 303, pp. 1-7
- Moneo, R. (1968) 'Madrid: Los últimos veinticinco años', *Hogar y Arquitectura (Revista bimestral de la Obra Sindical del Hogar)*, vol. 75, March-April, pp. 47-59
- Muñoz-Rojas, O. (2009a) *Wartime Destruction and Post-war Urban Reconstruction: Case Studies of Barcelona, Bilbao and Madrid in the Spanish Civil War and its Aftermath*, Ph.D. London: London School of Economics
- Muñoz-Rojas, O. (2009b) 'Falangist Visions of a Neo-imperial Madrid', *Journal of War and Culture Studies*, vol. 2, issue 3
- Nieto Alcaide, V. (1980) 'La Montaña del Príncipe Pío' in *Madrid. Tomo V. De la Plaza de España a El Pardo*, Madrid: Espasa Calpe
- Panagia, D. (2003) 'Delicate Discriminations: Thomas Hobbes's Science of Politics', *Polity*, vol. 36, no. 1, pp. 91-114
- Rigney, D. (2001) *The Metaphorical Society: An Invitation to Social Theory*, Lanham Oxford: Rowmand and Littlefield Publishers, Inc
- Thüsen, von der J. (2005) 'The City as Metaphor, Metonym and Symbol' in *Babylon or New Jerusalem? Perceptions of the city in literature*, edited by V. Tinkler-Villani, Amsterdam and New York: Rodopi
- Trenas, J. (1943) 'La nueva Casa del Partido. Versión arquitectónica del Nacionalindicalismo', *Fotos (Semanario Gráfico)*, 24 July
- Urbanización y Reforma 2-D-3/Caja 15655/Caja 215/Expediente 1/Año 1934, 'Expediente promogut per l'Associació de Veïns afectats per a la Reforma, Gran Via C', Barcelona: Arxiu Municipal Administratiu
- Weiner, D. B. and Sauter, M. J. (2003) 'The City of Paris and the Rise of Clinical Medicine', *Osiris 18* (Science and the City), pp. 23-42
- Zuazagoitia, de J. (1946) *Problemas Urbanísticos de Bilbao y su zona de influencia*, Madrid: Instituto de Estudios de Administración Local

Endnotes

¹ The Spanish Civil War took place between 1936 and 1939, and was the result of a rightist military coup against the democratic government of the Second Republic established in 1931. General Franco soon became the head of the rebel troops and, assisted by Hitler and Mussolini, eventually defeated the Republican side. After the war, Franco set up a dictatorial regime that lasted until his death in 1975.

² Barcelona had been the capital of the autonomous region of Catalonia since 1934; Bilbao became the capital of the autonomous region of the Basque Country shortly after the outbreak of the war in 1936; and Madrid remained the capital of the Spanish state during and after the war.

³ Cities were associated with workers and intellectuals and socialist ideas.

⁴ Falangism, or Spanish fascism, was the ideological movement on which Franco initially based his dictatorial regime.

2. Digging, Sowing, Tending, Harvesting: Making War-Fair

Gina Badger

Guerilla gardeners, if we take them at their word, are fighting a war. At best, they are countering the staggering force of state violence with a total mutation of terms. This war is not waged in brute force; there are no civilian casualties and no infrastructure is destroyed. Rather, these gentle guerillas operate in the name of public space, in the name of ecology, and their worst offence is tending otherwise forsaken properties without permission. Why claim this activity as a form of militant resistance? As the title of this writing collection – and the conference for which the papers were originally prepared – would suggest, the entry point for this investigation is the relationships between words and lived experiences of the city. As a modest first step towards a more fulsome evaluation of the contributions of urban gardening to anticapitalist social justice movements, the present writing looks to the historical origins of military metaphors for gardening, interrogates the professed aspirations of these appropriations, and attempts to square this heritage with the current popularity of one of guerilla gardening's most popular weapons, the seed bomb¹.

In *The Three Ecologies* (2000), Félix Guattari argues that environmental crises are transversal to problematics of social and political orders. In this formulation, ecology cannot not simply be concerned with environment or “nature” in its popular, romantic understanding, but needs to be equally attentive to the human social world. Guattari's three ecologies are social (political, economic); mental (metaphorical, subjective); and environmental. Understood in this way, the proliferation of all things “green”, manifested primarily in crass conceptions of “eco-friendly” consumption-come-environmental-activism, is not a valid contribution to projects of substantial ecological change. Rather, ecology needs to become increasingly politicised, and these politics need to be of a specific, anticapitalist order. Without radically revising the social conditions of production that reinforce deplorable environmental conditions, we can never hope to live up to our goals for a greener planet. With urban gardening as a case study, it will be argued here that the witty, critical, and loving employment of military metaphor can both invalidate state monopoly on the use of force *and* recast the terms of struggle in favor of radical democratic politics.

The green guerillas: ‘bringing the war home’

To the United States Air Force and the Republic of Vietnam army, the dense jungle surrounding the Ho Chi Minh Trail through Laos and Cambodia was impenetrable, chaotic, and dangerous; in an attempt to get a handle on this unruly situation, they had to strip the trees naked with a devastating array of chemical defoliants. Conversely, to North Vietnamese troops and Vietcong, the trail was a highly organised and logical transportation network that enabled the scale and force of their military resistance. Likewise, Fidel Castro and the 26th of July Movement troops relied on the dense vegetation of the Sierra Maestra mountains to protect their elaborate camp during the lead-up to the Cuban Revolution.

Perhaps the special importance of vegetation in these recent revolutionary struggles can help to explain why, in the early 1970s, a group of Lower East Side community gardeners began calling themselves the Green Guerillas². Besides prefiguring the guerrilla gardening movement proper, the appropriation of this militaristic term made explicit the political aspirations of this particular group. Simultaneously, it signalled the transformation of urban gardening from a state-sponsored activity (as with the War Gardens of World War I and the Victory Gardens of World War II) into a form of grassroots politics. The gardeners suggested, with a word, that their activities be considered in the same political sphere as those of militant anti-imperialists. They stated a desire to not only challenge state violence, but to do it on their own terms, which is to say, by digging, sowing, tending, and harvesting.

The Green Guerillas were one group of adherents to a rapidly-spreading practice of community gardening across the United States, Canada, and certain Western European countries. Building on the American tradition of urban allotment gardening established during the first and second World Wars and the Great Depression, as well as making use of the imported agricultural skills of new immigrants, the community gardening movement that began in the 1970s was a specific response to national trends of disinvestment, property abandonment, and municipal bankruptcy that were at their most acute in New York City.

The appropriation of the term *guerrilla* to describe an activity that seems at first blush to have very little in common with any form of militarism indicates a refreshing playfulness informed by an awareness of anti-imperialist politics and a desire to identify with them in solidarity. The radical politics of urban gardening are inherited, consciously or not, from the 17th century British communalist anarchists, the Diggers. These are politics that pay little heed to rights claimed in the name of private property or by bureaucratic and corporate monopolisation of resources. They are politics informed by anti-imperialist struggles in the Third World for a viable alternative to state-administered neoliberal capitalism. They are also politics of ecology, of insisting that in order for cities to stay viable and vital, they must include productive green space that is established, maintained, and used from the grassroots. Like all other appropriations, it is also a political tactic that risks doing a disservice to its source intentions. In *Soul Power: Culture, Radicalism, and the Making of a US Third World Left*, Cynthia Young describes this as a risk of reproducing the 'homogenising tendency of Western imperialism and colonialism' (2000, p. 12). In identifying their activities with those of militant radicals, largely in the global South, the Green Guerillas not only stated allegiance, but to a certain extent laid claim to their politics. This is a consequence that merits more full attention than I can give it here³.

In an effort to contextualise this formative act of appropriation, we must consider the peculiar experience of war for American civilians, people who are implicated by citizenship in wars they do not experience or support directly. Can dissenting Americans contest their country's military aggression by engaging in a kind of guerrilla war against their own neoliberal state? What is the appropriate form of force to take down such a beast? Urban gardening may offer a compelling response, especially in relation to projects that re-conceptualise the everyday experience of war for Americans. Artist and writer Martha Rosler's phrase 'bringing the war home', and the project from which it comes, suggests that the realities of American military ventures overseas are more closely connected to the domestic quotidian than is immediately evident. Rosler's *House Beautiful: Bringing the War Home* (1967-72; 2004) consists of two separate photomontage series that

superimpose news images from the Vietnam and Iraq wars onto highly designed interiors of middle class American homes, as if the soldiers and bloodied civilians were actually sitting in leather chairs or rushing through the kitchen. The strength of these images is in their insistence that the war is not a distant reality, but is always already at home.

The conceptual force of Rosler's images finds reinforcement in Beatriz Colomina's *Domesticity at War* (2007), in which she details the incorporation of military technologies into American homes during and after World War II. The reliance of the American economy on military expenditures and technological development has assured that every aspect of American civilian life is infused with militarism. Colomina provides ample examples to support her point, each a reappointment of military technology for civilian use: chemical weapons turned domestic-use insecticides and herbicides; the invocation of militaristic language in describing the defence of home and garden against pests; the introduction of ration-supplementing and patriotism-inducing allotment gardens in the form of War Gardens and Victory Gardens. Urban gardening itself, according to Colomina, has a profound debt to the extension of militarization to the home front. In this light, *bringing the war home* is simply the realisation that the home front itself is a state of perpetual warfare, manifested in the most everyday of landscapes and experiences. From that point forward, the ethical conundrum lies in deciding how to engage in an activism on the homefront that both offsets and counters state violence, which could be aptly termed making *war-fair*⁴. The response of the Green Guerillas, I suggest, is to garden.

The initial appropriation of militaristic terminology by the Green Guerillas has continued to inspire the development of new forms of urban gardening. Currently, there is a widespread enthusiasm for what has become known as guerrilla gardening. One of the movement's most outspoken enthusiasts, Richard Reynolds (2008), defines the practice simply as 'the illicit cultivation of someone else's land'. Despite the practice's clear reference to radical politics, as outlined above by the Green Guerillas' appropriation of the same label, it is important to remember

that there is nothing *inherently* critical in this practice. A more substantial understanding of Guattari's three ecologies may give us some idea of what might be required for a truly radical ecological praxis.

Radical ecology and values

Félix Guattari, echoing among others Gregory Bateson, has a beef with the way the capitalist value system 'flattens all other forms of value, alienating them in its hegemony' (Guattari 2000, p. 43). The profit-logic of capital, in its frenetically accelerating production and accumulation of surplus value, espouses only one method of evaluation based on value, a direct reflection of the degree to which it has been infused with human labour. Guattari characterises the effects of this value system as the 'dramatic dead ends' of capital, in terms that are still relevant two decades later: economic supervisions of the developing world leading to absolute and irreversible pauperisation; nuclear power; nuclear weapons; mass-media serialism; the subservience of government to the military-industrial complex (2000, pp. 20-23). In this bleak condition, 'it is not only species that are becoming extinct but also the words, phrases, and gestures of human solidarity' (2000, p. 29).

For Guattari, non-capitalistic value systems can be forged by the force of desire, and from measures of social and aesthetic profitability. An 'ecology of resingularisation', Guattari argues, would make it possible to envision and cultivate forms of desire and systems of value not subservient to the logic of capital (2000, p. 42). Resingularisation is characterised as an unpredictable, radical opening of the individual and social self, a cultivation of particularity and alterity elsewhere described by Gilles Deleuze and Guattari as 'becoming'. We can practice this cultivation through exercises like certain forms of urban gardening that rearrange our relationships with work, other organisms, and our consumptive needs and desires. Guattari's praxis of heterogenesis – continual processes of resingularisation – works always against the homogenising tendencies of the profit logic of capital. Heterogenesis needs to happen in and between the multiple scales or vectors of the three ecologies: mental, social and environmental.

Ecology and the study of biological systems called ecologies, is fundamentally about relationships. For Guattari, these relationships occur across multiple scales simultaneously. These are relationships between outsides and insides that are not separated or contained absolutely. 'An authentic political, social, and cultural revolution...must not be exclusively concerned with visible relations of force on a grand scale, but will also take into account molecular domains of sensibility, intelligence and desire.'

(2000, p. 20). The majority of environmentalism, at the time of Guattari's writing as in ours, has a tendency to focus only on the environmental scale of ecologies, prioritising notions such as conservation over the health or economic wellbeing of particular human communities.

Our metaphors, anchored in material experiences and operating dialectically in relation to them, are the way we make sense of our world. They are a political project. A key component of Guattari's three ecologies is the subversive, extra-logical power of metaphor. For Guattari, social and aesthetic profitability play out on a micro-political scale, and turn on questions of human creativity and desire. Likewise, in *Nature, Justice, and the Politics of Difference* (1996), David Harvey places special emphasis on the import of carefully-wrought metaphors – products of human creativity which can act as material forces with the power to shape history – in determining the politics of particular projects of valuation. Ultimately, Harvey argues for social justice as a process of valuation that is part and parcel of a radical eco-socialist position. He offers the following provocation: perhaps we should inspect arguments in the environmental-ecological debate, and the metaphors they employ, 'not for what they have to say about environment or nature but for what they say about political-economic organisation.' (1996, p. 176). In other words, any process of valuation developed in the service of environmental goals is equally a political project, and is best undertaken as such.

Genealogy of the seed bomb

Seed bombs seem to be everywhere these days. In the spring of 2009, they were the centre of an elaborate marketing campaign for the cosmetics company Lush, through its "Seed the Nation" contest. In 2008-2009, seed bombs were featured in a major exhibition at the Canadian Centre for Architecture (CCA), *Actions: What You Can Do With the City*, and in an article in the Los-Angeles based *Journal of Aesthetics and Protest*. Seed bomb making workshops were part of the CCA exhibition⁵, the Baltimore conference *The City From Below*, and Montreal's *Festival of Anarchy*. Recent bomb-based artists' projects by The National Bitter Melon Council, Three Miles (Noah Scalin and Christopher Humes), and Kathryn Miller have been featured in exhibitions and public performances. Digging into the history of this peculiar tool will allow a closer examination of the politics of metaphor.

In New York City in the 1970s, if you live in the Lower East Side or Harlem or the Bronx, living conditions had deteriorated to the point where it was pretty much impossible to sit back and do nothing about it. Responding to massive disinvestment, building deterioration, demolition and landlord arson that left many lots empty and accumulating rubble, residents across the city began

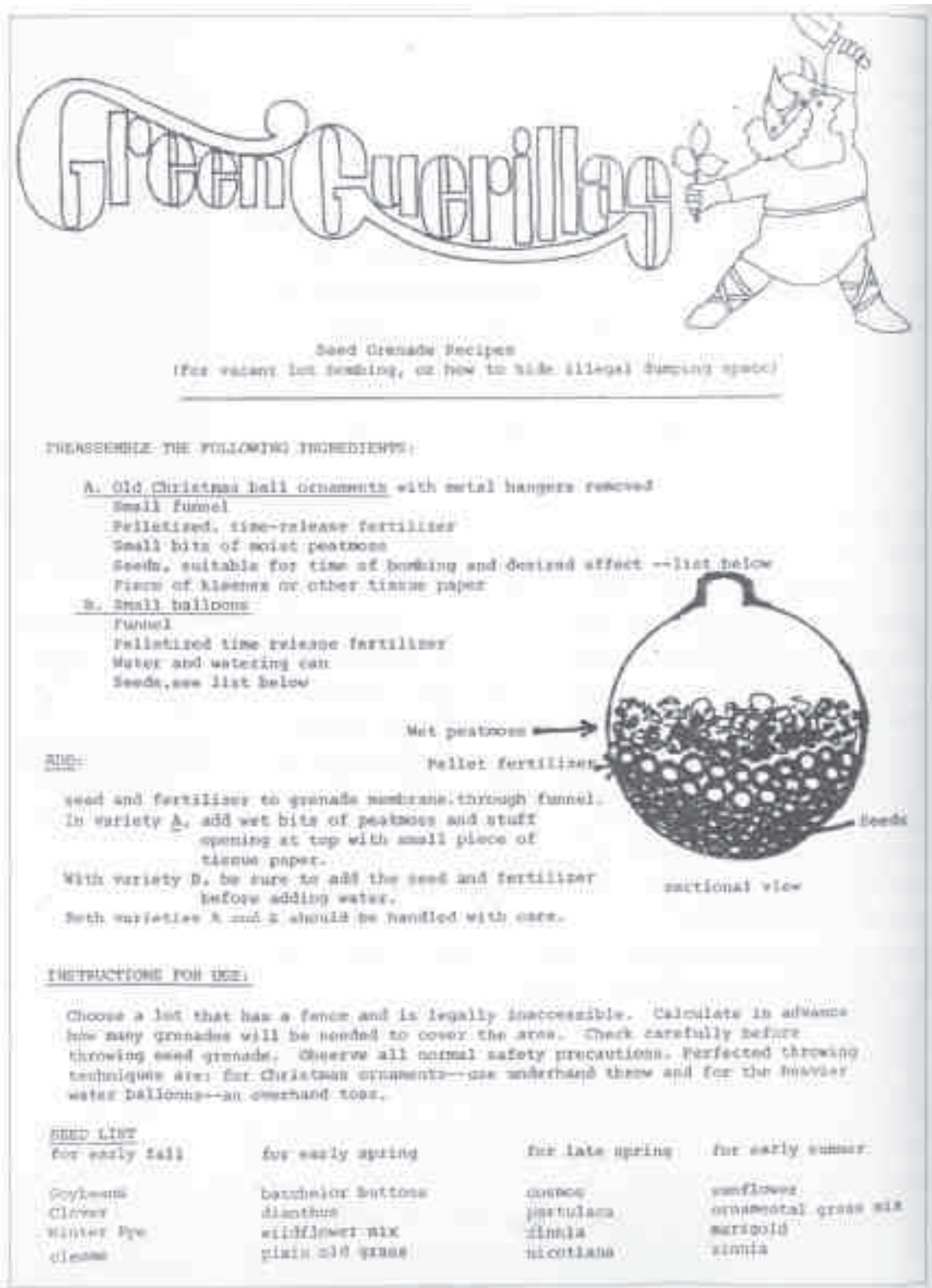


Figure 1. Green Guerillas. c.1973. Seed green-aide recipe. (By kind permission of Donald Loggins)

to establish gardens (Staeheli and Mitchell 2008, p. 98). The community gardening movement that emerged at this time was influenced both by the history of urban gardening in the United States – particularly the Victory Gardens campaign of World War II – and the imported skills and habits of new immigrants (Lawson 2005; Von Hassel 2002; Carlsson 2007, p. 83; Wolff-Erskine 2002).

Malve von Hassel describes community gardens as 'a kind of canary indicating economic and political fluctuations in the country' (2002, p. 36). Like the Victory Gardens campaign, and other nationwide gardening programmes that came before it, the community gardening movement emerged in response to prevailing economic and political conditions that created both a need for productive green space and the derelict land upon which it could be established (Lawson 2005; Von Hassel 2002; Carlsson 2007, p. 83). Community gardens were distinct from previous state-sponsored urban gardening initiatives largely due to their grassroots character; while earlier campaigns had been sponsored by either the state or charity organizations, the new community gardens relied on the time, labor, and skills of residents (Lawson 2005, p. 207; Von Hassel 2002, p. 32). In turn, the increasing popularity of guerrilla gardening may be understood as partially a response to the rapid, though not total, bureaucratisation of community gardening.

The majority of the New York City gardens were established on land appropriated by the city once it had been abandoned by its original owners and had fallen into tax arrears. Not having the funds to maintain the 11,000 lots transferred to its ownership during the fiscal crisis, the City allowed many buildings to deteriorate and then demolished them (Staeheli and Mitchell 2008, p. 98). A few landlords, put off by the prospect of gardens being established on their property, began to put up fences (Tracey 2007, p. 34). For the gardeners, the erecting of fences signalled a new, openly antagonistic phase of the deteriorating relationship between landowners and themselves. Property owners, be they private or state, could no longer be seen as simply dismissive of the needs of residents but in active opposition to them, and the fences preventing them from gardening became a potent symbol of this antagonism. This first clear act of defence was read as a declaration of war, and in response the gardeners needed a weapon. Enter the "seed green-aid," as engineered by the Green Guerillas.

In 1973, The Green Guerillas published a fact sheet detailing two different recipes for seed green-aids/grenades. The instructions were simple: fill either old glass Christmas baubles or balloons with time-release fertiliser, peat moss crumbs, and seeds, and lob them over the offending fences. A scanned copy of the original typewritten recipe is easy enough to find these days, on the internet and in at least one print publication (Tracey 2007, p. 94;

see figure 1). Von Hassel sees seed bombs as primary symbolic, explaining that they were:

[...] tossed over fences into vacant lots to start a literal grassroots revolution on "acres of opportunity", as they were called by one Green Guerilla member. It is a strategy still used on occasion, more for its powerfully symbolic content than for the actual chance of success; seeds do not do well in rubble and debris. Since the 1970s undoubtedly many of these balloons, actual and conceptual, landed on stony ground. (Von Hassel 2002, p. 22).

In fact, the roots of the seed bomb go back much further than the Green Guerillas, and the original recipe is designed specifically to help seeds germinate and thrive in adverse conditions. In the 1940s, Masanobu Fukuoka began to direct-sow seeds enveloped in clay pellets as part of his organic farming methodology, known to permaculturalists today as the Fukuoka Method. Fukuoka's use of clay-coated seeds was a revival of the ancient Japanese *tsuchi-dango*, or earth dumpling. Fukuoka's pellets, like the original *tsuchi-dango*, are ingeniously designed balls of clay, organic matter such as compost or manure, and seeds.⁶ If, as Lawson rightly claims, today's seed bombs are falling on stony ground, it is not because of a technical problem but a strategic, or social, one.

For Fukuoka, seed bombs were primarily a labour-saving agricultural technology that helped optimise seed sowing. Returning to Guattari's description of the three ecologies, we can see how the origins seed bombs correspond to an overtly environmental goal. In such an incarnation, the technology could serve a social function, in terms of the conditions of agricultural labour and the resulting production process. For the Green Guerillas, the seed bombs were about taking the offensive of private property seriously. An act of retaliation tailored to the offending property owners, the seed bombs were powerful because they illustrated persistence visually, as a spreading, unstoppable force of green. The real genius of the Green Guerilla appropriation of the technology does not lie there, but in the potency of their chosen metaphor. If the seed bomb is not just a tool but a weapon, the Green Guerillas were taking the theatre of war onto the metaphorical level, insisting that the ways we talk and think about space actively affect what we are able to accomplish.

It is the muddled ontological status of seed bombs: plant/tool/weapon; nice/nasty that makes them such a beguiling metaphor. Of course, calling un-warlike things warlike is nothing new. We regularly *defend positions, deploy strategies, battle illness, shoot down arguments*, and so on. When it comes to gardening, this metaphorical transfer is nonetheless refreshing, its contrast bright and strong. It is productive because it foregrounds and activates the politics of a practice that might otherwise remain

benign. Besides the complicated question of how such metaphors may affect our willingness to accept war as an acceptable solution to all kinds of conflict, there is something else at stake in these transfers of meaning.⁷

It is perhaps a little too easy to turn the symbolic potency of seed bombs into a kind of cultural capital that smacks of revolutionary cachet without having any meaningful connection to resistance movements. The moment of the seed bomb's incorporation in the Lush corporate ad campaign is an apt example of what happens to a metaphor when it is crafted lovingly and then abandoned in ideological wastelands. If instead, we follow Guattari in the insistence that political action must be carried out across the three ecological registers, and at multiple scales, perhaps these metaphors can be kept active, or even adapted to more nuanced and compelling forms. Military metaphors, if and when they are crafted and placed with a sufficient level of care, wit, and heart, can actually foreground the violence and oppressive force of war in a disruptively critical manner, opening up new fields of action. With their use of metaphor, guerilla gardeners refuse to ignore the realities of violent conflict, while simultaneously striving to define struggle, resistance, and engagement in politics in ways that invalidate multiple forms of state violence.

The Green Guerillas, in an admirable if somewhat awkward attempt at this kind of *détournement*, first chose the appellation seed 'green-aids'. This appropriation and adaptation flirts with militancy while forcing a mutation, perhaps even a cultivation, in meaning and intent. In another instance, *Plant the Piece* by Three Miles (2004) makes the ontological shiftiness of the seed bomb explicit with an overtly pacifist message. Their seed bombs take the form of revolvers, which when sprouting recall the iconic confrontation of a gun barrel and a cut flower. Danish collective N55 takes another approach to exploring the offensive potentials of seed bombs with their *Rocket System*, which launches capsules of Heath Bunting's 'superweed' seeds, designed to cross-pollinate and evolve gradually into a strain of plants resistant to widely used chemical herbicides such as Roundup®. The N55/Bunting collaboration directly confronts the attack on functional biodiversity mounted by Monsanto et al, while playing on the public's general fussiness about weeds.⁸

Richard Reynolds, Britain's self-proclaimed poster boy for the guerrilla gardening movement, is a champion of the seed bomb. Reynolds recently published *On Guerrilla Gardening: A Manual for Gardening Without Boundaries* (2008), a flashy volume whose great strength is in the admirable catalogue of contemporary guerrilla gardening practices on a global scale, as well as a rare overview of its prehistory and history. The text of *On Guerrilla Gardening* is rich with military references: 'assaults', 'offensives', 'attacks', 'arsenals', and so on. While Reynolds professes

allegiance to a certain anti-authoritarianism and is clearly interested in challenging exclusive private property relations, he is equally drawn to the fact that gardening is not inherently ideological. In public appearances, Reynolds is chiefly concerned with encouraging people to get involved, which means playing down guerilla gardening's more obviously oppositional aspects. At other moments, as in his published historical account, Reynolds insists on the subversive nature of the practice by appealing to its activist history. This appeal can be misleading.

While guerilla invasions of privately owned land *could* effectively claim space in the name of a public, stating and performing anarchic and communalist commitments, they could equally express bourgeois dissatisfaction with the aesthetic qualities of one's neighborhood and cooperate with, if not contribute to, gentrification processes. This non-ideological ambivalence is arguably part of what makes gardening in general such a widespread pastime. Using this rhetoric certainly doesn't deprive guerilla gardening of its capacities to contribute to particular political projects. It *does* confuse matters somewhat, in that sprucing up a barren road median can pass for the effective creation of democratic space, regardless of how this action is implicated in other socio-economic conditions in the neighboring area.

Gardening comes with a built-in set of metaphors referencing care, growth, and health ("cultivating" peace; "planting seeds" of hope; and so on). To these, the slogans of state-sponsored World War I and World War II gardens added "our food is fighting"; "sow the seeds of victory"; "dig on for victory"; "every garden a munitions plant," and so on.⁹ Guerilla gardening's use of metaphor spins this nationalism, defense strategy, and state aggression to conceptualize a grassroots political movement. These metaphorical innovations, to extend Guattari's analysis, operate primarily on the level of mental ecologies. The great disappointment with seed bombs lies in the fact that the metaphor is so active – explosive, even – that people seem to think it can be left alone to do its work. How else would the form be so popular with artists who, no matter what other strategies inform our social practices, garner much of our particular powers through our metaphors? If that the restriction of seed bombs to the level of metaphor can account for their relative infertility where the furthering of anticapitalist politics is concerned, it may be possible to reinvigorate them still through connections to other forms of ecological activity. In order to really consider the subversive effectiveness of guerilla gardening and urban gardening more generally, we would need to ask how well they are able to access all three registers of ecological praxis.



Figures 2a & b. Participation Park 2008. (By kind permission of Scott Berzofsky)

Making war-fair: gardens for a postcapitalist world

At best, gardening-as-politics allows dissenting citizens *not* subjected to the overt daily violence of warfare to build a rich social movement using skills that enable economic autonomy and the creation of new systems of valuation, while taking advantage of the resources at hand. An account of the contributions of urban gardening to social justice and anticapitalist activism would be an essential follow-up to the historical and theoretical analysis developed in the present writing. While we cannot do justice to such an examination here, it may be possible to produce a sketch according to projects which highlight three important themes in such activism: the “right to the city”; environmental justice and food security; and the fostering of alternative processes of valuation pertaining to labour and resources.¹⁰

As alternative processes of valuation have been central to our arguments regarding radical ecology, we should note that many gardening initiatives contribute to them in some way. For instance, urban gardening networks encourage: resource and skill sharing; recycling of materials, organic wastes, and excavated soil; seed saving; food donations; relationships with soup kitchens; and appropriations of private property. Combining social justice concerns, innovative approaches to land use, and conscientious ecological interventions, these initiatives provide an important model for small-scale food production in cities that is profoundly threatening to large-scale industrialised farming. The following examples flesh such contributions out further.

Right to the city: property relations and the creation of publics

David Harvey, in a recent essay published in the *New Left Review*, proclaims that ‘the right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city’ (Harvey 2008, p. 23). Over the past 30 years, the increasing neoliberalisation of the global economy has affected the lives of cities generally. According to Harvey, under neoliberal rule, our cities ‘increasingly consist of fortified fragments, gated communities and privatised public spaces kept under constant surveillance’ (2008, p. 32). As such, the right to the city has a lot to do with the creation of new relations of labour and property – new publics – that do not operate according to the capitalist model. As previously discussed, most of the gardens established in New York City in the 1970s occupied fallow land owned by the city. These community gardeners literally seized and then defended property in order to establish new publics. In their book *The People’s Property?*, Lynn Staeheli and Don Mitchell describe community gardens as ‘publicised property that fosters a certain kind of community, and thus has its own effects on how the public is structured and who is included in it’ (2008, p. 95).

Participation Park (see figure 2), a community gardening and art project in Baltimore, is an example of a contemporary initiative that takes into account the complex politics of property rights as they relate to the establishment of functional publics. Initiated by the Baltimore Development Cooperative (Dane Nester, Scott Berzofsky, and Nick Wisniewski) in 2007, Participation Park is located in East Baltimore. The garden, now entering its fourth season, is maintained wholly by volunteer labour and focuses on cultivating produce that can serve as a nutritious resource for its neighbours. Berzofsky explains the group’s position with respect to property: ‘[...] we’ve decided against going the conventional route for gaining land security, which would be to either buy it or put it into a community land trust [...] Both of these approaches reinforce the dominant relations of private property ownership that we want to question. So, instead we’re explicitly squatting as a form of direct action.’ (Berzofsky and Dennis 2008). Here, the struggle for the creation of a public is stressed above and beyond other concerns; even though it may jeopardise the long-term stability of Participation Park, the gardeners take the distribution of the right to the city as a political goal of the utmost importance.

Edible gardens: environmental justice and food security

Intimate local knowledge is described as ‘contextual intelligence’ by Jason Corburn (2005) in *Street Science: Community Knowledge and Environmental Health Justice*. For Corburn, it is an asset in the struggle of city residents to meet their needs through policy change, securing increased service provision, and participation in better health studies. Environmental health justice projects, such as the ones described by Corburn in *Street Science*, aim to identify and remediate the uneven health effects of industrialisation and post industrialisation on poor urban communities.

Beginning in 1995, Williamsburg-Greenpoint based environmental justice activists, under the banner of the Watchperson Project, participated in a US Environmental Protection Agency (EPA) study on neighbourhood risk exposures to environmental pollution. The Watchperson Project helped the EPA to identify the practice of subsistence fishing as a significant source of toxic exposures. As neighbourhood residents knew, many Puerto Rican and Dominican families were relying heavily on the consumption of fish from the East River for sustenance, and they suspected that the fish were contaminated with heavy metals and other toxins. Along with EPA officials, the Watchperson Project created and conducted a survey that exposed the full extent of this practice. Analysis of fish species commonly consumed also showed significant levels of contamination. While the EPA struggled to include this data in their larger risk assessment of neighbourhood toxin exposures, the Watchperson Project initiated an educational campaign and a community garden. The

garden was meant to provide a supplemental source of food for the residents, reinforcing diets heavily reliant on contaminated fish.

The Watchperson Project garden illustrates the role of urban gardening and food security in environmental justice projects. On its own, the garden cannot accomplish much. It is only through its relationship to an education programme, the gradual reevaluation of a meaningful cultural habit (fishing), and its couching within a wider analysis of uneven resource – and waste – distribution that it begins to offer real promise as a site for radical change. While the next step in this project is to go “upstream” – holding the producers of pollution responsible for long-term management of remediation projects – immediate, grassroots activity such as the Watchperson Project garden can establish robust and long-term alternative infrastructures that can support their communities regardless of state and industry reform.

Alternative processes of valuation: labour and resources

Elements of alternative processes of valuation encouraged by urban gardening networks include resource and skill sharing; recycling of materials, organic wastes, and excavated soil; seed saving; food donations; relationships with soup kitchens; and appropriations of private property. Combining social justice concerns, innovative approaches to land use, and conscientious ecological interventions, these initiatives provide an important model for small-scale food production in cities that is profoundly threatening to large-scale industrialised farming.

Nance Klehm, a self-described ‘radical ecologist, designer, urban forager, grower and teacher’, based in Chicago, runs a living seed archive that involves a network of people growing crops from “loaned” seed, saving the next season’s seeds, and returning a quantity to the archive for further distribution. Unlike the headline-making Svalbard Global Seed Vault, opened early 2008 in Norway, the fact that ‘seeds are alive’ is central to Klehm’s public seed archive.¹¹ Seeds are recognised as a resource optimised through use, not conservation. Heirloom varieties of fruits and vegetables exist thanks to many generations of open-air pollination and seed saving, resulting in robust varieties prized for their unique, sometimes unpredictable, characteristics. The saving and sharing of organic and heirloom variety seeds is an important part of how urban gardeners create an alternative to large-scale, industrialised food production reliant on the use of synthesised fertilisers, pesticides, and herbicides.¹²

Of course, gardening’s most valuable resource is human labour. In his catalogue of radical urban practices that ‘invent the future today’, Chris Carlsson (2008) argues that the freely-given labour

that keeps community gardens planted, watered, and weeded has the potential to shape a new class composition. Volunteer work ‘fundamentally alters the subjective experience of work’ because it is a relationship defined by the satisfaction of the labour itself, the relationships it creates, and the unmediated and localised use of its products, rather than by ‘coercion, by autocratic management and obedience, by the reward of wages’ (2008, p. 95). The edible fruits of this volunteer labour are not necessarily commodities for the market. In some of its forms, urban gardening creates a localised, renewable food source that exists autonomously from capitalist systems of production and exchange.

A project with these intentions is *Victory Gardens 2010+*, initiated by Amy Franceschini in San Francisco. The project was initially inspired by the prolific wartime production gardens of the same name, in which American civilians worked 20 million gardens, supplying 41% of the national food supply (Franceschini and Ulke 2008). *Victory Gardens 2010+* started as a ‘pilot project funded by the city of San Francisco that supports the transition of backyard, front yard, window boxes, rooftops and unused land into food production areas’, and established a massive, multi-organisation garden in front of the San Francisco City Hall. But Franceschini, an artist, founded the new edition in the interests of food security rather than national defence. Drawn to the politics of ‘reclamation and redefining an idea or program [sic.]’, Franceschini’s project redefines *victory* as ‘building an alternative to the American industrial food system which we view as injurious to ourselves and to the planet.’ (Franceschini and Ulke 2008).

Conclusion

The previous examples indicate how gardening initiatives can be incorporated into social justice projects in order to further anticapitalist goals. Exceeding the framework of *The Three Ecologies*, the arguments developed here show that more strategic employment of metaphor would further enhance these practices' contributions to radical ecological praxis. Guattari emphasises resingularisation as a force to confront capital, and the fruitful disruptiveness of metaphor can contribute greatly in this regard. The power of specially crafted metaphors to rearrange horizons, commitments, and desires cannot be underestimated, making their judicious use critical to projects of anticapitalist valuation. *Victory Gardens 2010+* is an exemplary case of an initiative that manages to work transversally across the micro-politics of metaphor, desire, and pleasure; city-scale negotiations of public space; and consumptive patterns with global economic implications.

The critical examination presented here emerges, first of all, from a confusion of terms. Appropriations of militaristic vocabulary to describe forms of urban gardening hints at the political aspirations of those practices. The disappointment of fizzled seed bombs indicates that care must be taken to ward off glib appropriations that make grand political claims and associations without following through, facilitating a dismissal of urban gardening as another hopelessly utopian project, or worse, a kind of harmless rascality. At their best, however, these metaphors insist on a mutation of militarism that has the potential to change how activists conceptualise their resistance. Guattari's compelling descriptions of ecological praxis on multiple registers and scales incorporates metaphor as a key component of radical social change. In order to fulfill this role, metaphors must be fostered as material conditions that have the power to change the prevailing conditions of struggle, in the hopes, even, of making war-fair.

References

- Berzofsky, S. and Alyssa Dennis, A. (2008) 'Participation Park: Where Art and Politics Meet', Go for Change, <http://www.goforchange.com/2008/11/26/participation-park/>
- Carlsson, C. (2008) *Nowtopia: How Pirate Programmers, Outlaw Bicyclists, and Vacant-lot Gardeners are inventing the Future Today*, Oakland (CA): AK Press
- Colomina, B. (2007) *Domesticity at War*, Cambridge MA: MIT Press
- Corburn, J. (2005) *Street Science: Community Knowledge and Environmental Health Justice*, Cambridge MA: MIT Press
- Franceschini, A. and Tucker, D. (2010) *Farm Together Now*, San Francisco: Chronicle Books
- Franceschini, A. and Ulke, C. (2008) 'SF Victory Gardens 2007+', *The Journal of Aesthetics and Protest*, vol. 2.6, issue 6, <http://www.joaap.org/6/lovetowe/franceschini.html> [Accessed January 30, 2010]
- Fukuoka, M. (1985) *The Natural Way of Farming*, Tokyo: Japan Publications
- Guattari, F. (1989) *The Three Ecologies*, London: The Athlone Press
- Harvey, D. (1996) *Justice, Nature and the Geography of Difference*, Cambridge: Blackwell Publishers
- . (2005) *A Brief History of Neoliberalism*, Oxford: Oxford University Press
- . (2008) 'Right to the City', *New Left Review*, vol. 53, pp. 23-40
- Kruglanski, A. (2008) 'Seed Balls: A Judo Trick to Germinate the Seedlings of a Free Culture', *Journal of Aesthetics and Protest*, vol. 2.6, issue 6, pp. 100-109
- Lakoff, G. and Johnson, M. (1980) *Metaphors We Live By*, Chicago: University of Chicago Press
- Lawson, L. (2005) *City Bountiful: A Century of Urban Gardening in America*, Berkeley: University of California Press
- Reynolds, R. (2008) *On Guerrilla Gardening: A Handbook for Gardening without Boundaries*, New York: Bloomsbury
- Schaffner, C. and Wenden, A. (1995) *Language and Peace*, Aldershot: Dartmouth Publishing Company
- Staeheli, L. and Mitchell, D. (2008) *The People's Property? Power, Politics, and the Public*, New York: Routledge
- Tracey, D. (2007) *Guerrilla Gardening: A Manual*, Canada: New Society Publishers
- Von Hassel, M. (2002) *The Struggles for Eden: Community Gardens in New York City*, Westport CT: Bergin and Garvey
- Woelfe-Erskine, C. (2002) *Urban Wilds: Gardeners' Stories of the Struggle for Land and Justice*, Oakland: Water/Under/Ground Publications
- Young, C. (2006) *Soul Power: Culture, Radicalism, and the making of a US Third World Left*, Durham: Duke University Press

Endnotes

¹ The descriptions and arguments in this text rely on distinctions between three related practices: *urban gardening*, *community gardening*, and *guerrilla gardening*. Urban gardening refers to any historical or contemporary activities that involve the active planting and/or tending of city space. Community gardening designates a particular form of urban gardening whose emergence in the United States was spurred on by urban fiscal crises in the 1970s. The development of community gardening was informed by bureaucratically-operated urban agricultural programmes with moral and nationalist overtones, particularly WWI's War Gardens and WWII's Victory Gardens. Community gardening began as a grassroots form of spatial practice, but quickly became bureaucratised itself, and it still suffers from the crush of property speculation and private ownership rights. For more information on this fascinating history, see Franceschini (2008), Von Hassel (2002), and Lawson (2005). Finally, guerrilla gardening is specific term referring to certain forms of urban gardening, usually distinguished by their illicit, clandestine character. Guerrilla gardening developed alongside community gardening, as an offshoot of some of the latter's political concerns. Some of the clandestine nature of guerrilla gardening can be read as a direct response to community gardening's rapid bureaucratization. Further accounts of the history of guerrilla gardening, and a comprehensive exploration of its practices can be found in Reynolds (2008) and Tracey (2007), and in the first and second sections of this paper.

² Thanks are due to Quinn Slobodian for helping to draw out these historical connections.

³ This calls for a separate but related critique of the 'guerrilla' appropriation. While making claim to radical leftist politics, this appropriation does not forge practical alliances across national borders (or race and class divisions within the United States). This type of allegiance would no doubt be one way for gardening to develop the scope of its radical politics. Young defines radical as having 'profound counterhegemonic effects in the social word' (11). I would only add a nod to the etymology of the adjective; if the goal is to be radical, it is crucial to address hegemony not only "profoundly," but at its roots.

⁴ An unfortunately underused term from the Italian Autonomists, c.1960s.

⁵ For purposes of full disclosure, this workshop was led by the author, at the artist-run centre DARE-DARE.

⁶ The pellets offer several benefits for arid or otherwise hostile growing environments. The dried, hardened clay allows for digless sowing, stops the seeds from blowing away in the wind, and protects them from birds and other munching predators (Fukuoka 1985, p. ii). Out in the elements, the seeds will be protected until optimal germinating conditions arrive. Once sufficiently moistened, the clay softens, admits oxygen and water, and the seeds begin to germinate. The spouting seeds develop roots that further loosen the clay. The molecular composition of clay is ideal for assisting nutrient transfer from the organic matter to the new roots, thus sustaining the plants through their most fragile stage of development. As long as the plant is a hardy one and its roots have got somewhere to go once they get too big for the clay ball, the seed bomb has succeeded in establishing the plant. For a good description of the role of clay in nutrient transfer from soil to roots, see Sadava, D. et al. *Life: The Science of Biology*, Macmillan, 2006 (pp. 781-787).

⁷ For more on the implications of the use of military metaphor,

readers should consult G. Lakoff, G., and Johnson, M. (1980), *Metaphors We Live By*, University of Chicago Press: Chicago; and Schaffner, C. and Wenden, A. (eds) (1995), *Language and Peace*, Dartmouth: Dartmouth Publishing Company.

⁸ As any urban ecologist worth her salt will tell you, a weed is just a subjective interpretation of a plant that's growing somewhere that it was not wanted. Often, "weeds" such as mugwort (*Artemisia vulgaris*), play important ecological functions, altering the chemical composition of the soil so as to make it more amenable to other vegetation. See the 'Manuals' section of N55's website for more information regarding this and other projects. <http://www.n55.dk>

⁹ Poster slogans from the Victory Gardens Campaign.

¹⁰ Amy Franceschini and Daniel Tucker's forthcoming volume, *Farm Together Now* (2010), promises to include a much more thorough catalogue of urban gardening practices, along with accompanying critical dialogue.

¹¹ See 'Times Topics' section of *The New York Times* online for a comprehensive list of news coverage relating to the Svalbard Global Seed Vault. More information about Klehm's seed archive can be found on her website, Spontaneous Vegetation. (<http://spontaneousvegetation.net>).

¹² Non-profit, volunteer organisations in the United States (Seed Savers) and Canada (Seeds of Diversity) have been pursuing similar projects on a larger scale for multiple decades.

3. For Whose Benefit?

The Role of Consultation in the Compulsory Purchase of the Site for the 2012 Olympic Games in delivering a 'Sustainable Communities' Legacy

Juliet Davis

The broad aim of this paper is to explore relationships between the stated or worded aims of contemporary policy geared to delivering 'sustainable communities' and actual outcomes of particular processes in which this is instrumented and unfolds. It focuses on the interplay between 'consultation' and 'compulsory purchase' tools in relation to the assembly of land for the Olympic and Legacy site in East London. It considers the effectiveness of these tools - operated in conjunction - in beginning to fulfil the legacy aim and commitment to create a basis for 'sustainable living' on the site in the future.

According to the International Olympic Committee Evaluation Commission's report dated 6th June 2005, the London Bid Team's 'Olympic Games concept and legacy' were key to its success in securing the 2012 Olympic Games (IOCEC 2005, p. 71). One of the four main components of the Bid Team's 'concept' is articulated as an aim to harness the potential of an Olympic Games to act as a powerful catalyst to the regeneration of East London 'communities and their environment' (p. 16). Former London Mayor Ken Livingstone argued that that this capacity made the prospect of an Olympic Games appear as a 'unique opportunity' for London (Livingstone 2003). The 'opportunity' has since been presented as an economic model constructed to reveal how relatively short term public investment in the Games could be cultivated and eventually recouped in the longer-term through the development of a durable 'legacy' of infrastructure, venues and parklands capable of forming the primary anchors to compact, mixed-use urban development. To enable the impact of this 'opportunity' at a particular location to be maximised, the site chosen for the 2012 Games is in an historically deprived region of East London - the Lower Lea Valley. This had been earmarked by Livingstone from 2000 as a priority area for public investment, focussed on improving urban conditions associated with marginal residential 'communities', fragmentary business use. Indeed, a key aim for the regeneration of the Olympic site and its surroundings which has evolved since the bid and which is articulated as a form of pledge in the Greater London Authority's 2007 '5 Legacy Commitments' is to create the conditions for so-called 'sustainable living' (GLA 2007, p. 3) to occur on the site in the future.

The former Mayor's 'commitment' coheres within a broad body of New Labour urban policy relating to the creation and promotion of 'sustainable communities' that has been produced since the millennium (ODPM 2003, 2004, 2007). 'Sustainable communities' policy produced at central government level informs the language, aims and approaches of a wide range of regional and local policies and planning frameworks. Within Urban Studies, scholars have suggested that the emphasis placed in these new policies on 'community' in the context of regeneration is reflective of a paradigm shift away from private property-led approaches to physical regeneration toward more integrated public and private, socio-economic and physical approaches (see for example, Imrie et al 2008; Imrie & Raco 2003). Imrie and Raco convey the sense that this has arisen at least in part in broad response to critiques of the ethos behind and outcomes of Tory government endorsed regeneration programmes of the 1980s and early 90. However, in relation to the recent emphasis on 'community', they identify the need for greater clarity in terms of what 'community' means in practice, in the context of the cosmopolitan, global city and on how it is effectively constructed through regeneration policies and associated implementation processes.

The ODPM's *Sustainable Communities: Building for the Future* policy launched in 2003 identifies 'partnership' and 'consultation' as key tools for the delivery of 'sustainable communities'. These are both processes aimed at distributing decision-making powers through the forging of collaborative ties across the broad cross-section of actors and sectors involved in and/or affected by urban renewal plans. A quite different instrument advocated concurrently and somewhat ironically for realizing physical regeneration at the scale of neighbourhoods and districts is the *Compulsory Purchase Order* (CPO). The CPO is a specific power vested in a development corporation or regeneration agency by central government to acquire privately owned lands using public funds. It forms the means by which a mega-site such as the 2012 Olympic site can be 'assembled' and then subjected to a comprehensive redevelopment programme.

When the commitment to deliver a community-oriented Legacy for the Olympic site was first formulated, it was met with a degree

of public scepticism. Think tank Demos argued, for example, that past experience renders the assertion that an Olympics could generate 'sustainable communities' unconvincing. Past Olympic Games have tended to be associated with problems such as the creation of venues which become 'white elephants' with little potential for a legacy reuse and escalating costs which, far from creating 'opportunity', take host cities years to repay. In these terms, Vigor et al suggested that whilst 'all levels of government argue that an Olympic Games provides the opportunity to deliver regeneration benefits to East London within the context of the Sustainable Communities Plan' (Vigor et al. 2004, p. 10), questions of how and for whom 'benefits' might be directed remained significantly unaddressed at the time of the Olympic bid.

This paper is set out in two parts. In the first part of the paper, the term, 'sustainable communities', is unpacked. The nature of the link made between 'consultation' and 'compulsory purchase' in 'sustainable communities' policy is then explored, in part by highlighting some of the difficulties that recent research has identified in relation to this link in practice. The second part of the paper involves analysis of consultation processes associated with the compulsory purchase of the 2012 Olympic site. It explores how consultation and compulsory purchase were brought together in the form of a 'negotiated CPO' and the significance of this for occupants of the site who were involved. Consultation, managed by the London Development Agency, was undertaken with the aim of establishing suitable sites for the relocation of these occupants on a more or less permanent basis. This, crucially, was based on a view that many, if not all of their uses were not compatible with the 'sustainable communities' envisioned for the site in the future. In these terms, 'sustainable communities' as a vision of the future is separated from the realities of the site in the present, which served at least to highlight the complexity and variety of social groups, social ties and their diverse relationships to place. This raises questions not only about the meaning of 'community' but the efficacy of tools proposed for its 'construction'.

This exploration draws on material gathered through a series of interviews carried out in late 2008 with representatives of five

former Olympic site user groups – a business, two residential groups, an allotment gardening society and a cycle centre. It reveals a series of positions that occasionally coalesce but are often highly differentiated in relation to: the notion that an Olympic Games can be viewed as or succeed as a generator for 'sustainable communities', how former occupants felt their 'communities' were understood and handled, how they viewed their role in terms of the negotiation and what they perceived as the outcomes.

'Sustainable Communities' in theory and practice

Urban researchers frequently highlight the difficulty of defining either 'sustainable' or 'community', given the complex of issues that determine the extent of the former and the multiplicity of expressions of the latter. Agyeman and Evans argue for example that whilst the definitions of sustainability provided by the World Commission on Environment and Development (1987) and the International Union for the Conservation of Nature are the most cited, there remains no one 'agreed-on definition of sustainability' (Agyeman and Evans 2003, p. 36). They claim that none of the broad definitions of 'sustainability' on its own sufficiently address questions of 'justice' and 'equity' which they hold to be 'of pivotal importance' in relation to a balanced society and to social life (Agyeman and Evans 2003, p. 36). Smith highlighted the broad reach of the term, suggesting that the definition of sustainability 'takes place against the background of four linked phenomena: climate change, urbanisation, economic growth and globalisation', each vast in scope and multi-scalar influence (Smith 2008). Smith notes that in the context of 'communities', the term 'sustainable' stands simultaneously but often ambiguously, for the values of stability or continuity in the life of 'neighbourhood' places and for the values of environmental quality or protection.

Sustainable Communities: Building for the Future - a policy geared to delivering 'sustainable communities' – puts forward a spatialised understanding of 'sustainable communities' stating that these are 'places where people want to live and will continue

UNSUSTAINABLE	SUSTAINABLE
<div>1. Low demand and abandonment</div> <div>2. Empty homes</div> <div>3. Homes falling below the 'decent homes' standard</div> <div>4. Poor quality local environments</div> <div>5. Apparent shortage of land</div>	<div>1. Are prosperous</div> <div>2. Have decent homes for sale or rent at a price people can afford</div> <div>3. Safeguard green or open space</div> <div>4. Enjoy a well-designed, accessible and pleasant living and working environment</div> <div>5. Are effectively and fairly governed with a strong sense of community</div>

Figure 1. The Characteristics of a Sustainable Community. (Davis 2009)

to want to live' (ODPM 2003, p. 5). In these terms, it establishes a set of characteristics of 'sustainable community' *places* in contrast to those deemed 'unsustainable', as indicated below.

The characteristics of sustainable communities listed above are variously political, physical, economic and spatial. It may be assumed however, that each would be visually evident in an urban landscape. Defining 'sustainable communities' in this way relies not only on viewing community as a location, but also in terms of an assumed set of values—relating, for example, to the significance of 'green space', or to visual markers of order, prosperity and so on. A number of authors have suggested that the tendency in urban policy to define community along such lines is reductive. Edwards, for example, argues that the association of community with place can seem to ignore the variety of geographic scales at which communities cohere in a global society and the spectrum of relationships that community groups actually form with place, and thereby produce a 'homogenising effect' (Edwards 2008, p. 1668). Lees similarly argues that all-embracing or what she terms 'totalising' notions of 'the community', particularly when they encompass generalised values such as social harmony or order can seem to downplay the characteristics of cultural diversity (Lees 2003, p. 79). Frug argues that a first step toward addressing multiple social problems in cities should involve dropping all the 'romantic sense[s] of togetherness often associated with the term "community"' (Frug 1999, p. 115). supports conceptions of community as fundamentally 'heterogeneous', reflecting the actual diversity of cities, including conflictual ways of using, seeing and imagining them. For Frug, urban policy processes of 'community building' (p. 115) can only be effective in the context of clearly articulated understandings of 'the community' as 'heterogeneous' and of its spaces as thus inherently contested.

Sustainable Communities speaks of the revitalization of communities on the one hand and the creation of new communities on the other. There is little acknowledgement in this of cultural or historical factors that may influence the

composition of either kind, of the time it might take for a 'community' to take shape, or of the relationship between specific communities of cultural affiliation, interest or place, and broader society. Richard Sennett (2002 [1977]) reveals how the notion of 'community' transformed in Anglo-American culture between the eighteenth century and late twentieth century and the impacts of this on urban space. Sennett contends that over the course of the twentieth century in particular, 'community' became increasingly associated with 'intimacy' over collective life, becoming thus conflated with notions of personal 'identity.' In *The Uses of Disorder* (1973), he links this new association with practices of what he terms 'purification' in the modern city. 'Purification' represents the reduction and/or control of social diversity through the spatial segregation of society along lines of ethnicity, faith, sexuality and/or socio-economic class 'identity'. Whilst this analysis points to dangers in focussing on specific communities of affiliation or interest at the expense of broader social networks and connections, it also suggests value in articulating the complex, evolving relationship between them as this has spatial consequences and effects.

Sustainable Communities: Building for the Future acknowledges that place-based communities are diverse in and of themselves and the difficulties in defining shared interests and needs. It is arguably at least in part because of this that the introduction states that the document is not intended to merely outline a vision of 'community', but to provide the backbone of an instrumental 'programme of action' (p. 5). The main sections of the document are accordingly structured in a linear sequence of 'challenges', 'responses', 'resources' and 'actions'. The text of the policy progresses quickly from the identification of problems at a broad scale to a prescription of tools deemed effective to their solution. *Planning Policy Statement 1* (ODPM, 2005) asserts that whilst spatial planning at the level of local authorities and developers is an important delivery tool, it is not sufficient for 'meeting the diverse needs of all people in existing and future communities, promoting personal well-being, social cohesion and

creating opportunity for all citizens' (ODPM 2005, p. 7). It follows in *Sustainable Communities* that 'partnership' in development – understood as a process of engagement and decision-making between policymakers at national and local levels, developers, designers and project 'stakeholders' – is crucial (ODPM 2003, p. 6). Both *Sustainable Communities* and PPS1 suggest that, in addition to 'partnership', processes of 'consultation' with communities impacted by development proposals are vital 'delivery mechanism[s]'

Consultation became a statutory requirement under the *Planning and Compulsory Purchase Act* introduced in 2004 (ODPM 2005, p. 16). *Sustainable Communities* suggests that the practice of 'consultation' is intended to address the issue that 'too often in the past, delivery vehicles have been imposed on local communities rather than harnessing their expertise and knowledge' (ODPM 2003, p. 43). The tone of this statement chimes with Imrie and Raco's assertion that contemporary British urban policy encourages 'the revival of citizenship and the activation of communities to spearhead urban change' (Imrie and Raco 2003, p. 4). Indeed, the promotion of 'partnership' and 'consultation' in development exemplify what many authors identify as recent UK government's broad objective of dispersing centralised powers amongst a spectrum of institutions and actors. As Edwards argues, the 'government is seen as no longer having a distributive, directive function, but having one where it acts as a collaborator, or adjudicator between many different agencies' (Edwards 2008, p. 1667).

In this context, practices of 'consultation', 'participation' or 'engagement' are key in reflecting who is included in the composition and constitution of 'sustainable communities'. In theory, 'consultation' events have the capacity not just to bring together representatives of existing local groups but to actively construct 'community' in time and space. However, as Edwards and others point out, defining precisely what purposes community building exercises serve in relationship to development and how to conduct them in order to achieve stated aims has been shown to present 'a number of dilemmas' (Edwards 2008). Not only may the role of such exercises be subject to competing interpretations but they are said to be frequently subject to disjunctive agendas. Raco (2007) notes the difficulties of 'harnessing' the expertise and knowledge of 'communities' in a productive fashion, given the looseness of the term 'community' in relation to the diversity of groups and individuals that local areas often present. He writes that '[i]f communities can be variously described as place-based, interest-based, class-based, gender-based, and so on then policy makers at the local level, often working with limited resources [...] face an almost impossible task in resolving complex representational and practical issues' in relation to urban development (Raco 2007, p.

34). Edwards's study indicates that 'consultation' fails in principle and in terms of outcomes when modes of communication are adopted which treat the consulted as 'far from equal partners' (Edwards 2008, p. 1667). The effectiveness of consultation as a tool for 'community building' clearly relies on the specific contexts in which urban renewal actors both interpret and apply aims outlined in 'sustainable communities' policy.

A quite different instrument advocated concurrently for realising 'sustainable communities' is the Compulsory Purchase Order (CPO). The *Sustainable Communities* policy makes clear that both powers and funds will be made available to development agencies such as the London Development Agency and English Partnerships to assemble land for the purpose of regeneration. Common criticisms of CPOs (see, for example, Imrie and Thomas 1989, 1997; Hall 1998, pp. 928-929; Brownhill 1993, pp. 42-44) have focused on their typically adversarial nature and tendency to result in the disempowerment of local people – often already disadvantaged – at the hands of state-sponsored organisations. As Imrie and Thomas note, CPOs have often been presented to localities in nonnegotiable terms 'underpinned by a legal ideology which seeks to legitimise land acquisition by appealing to a broader public interest' (1989, p. 1401). Interpretations of 'the public interest', they suggest, have often been mobilised to 'justify the ignoring of specificities of individual need' (p. 1401). Raco has similarly argued that CPOs and their associated regeneration schemes have tended to be shaped 'by powerful, non local agents whose main concern is to maximise profit returns' (2004, p. 35) in the short-term, a process which would appear to run counter to the notion 'public interest'. The frequent association of CPOs with *tabula rasa* approaches to development suggests not only the devaluing of local people but also of existing places, indicative for Raco of a broader philosophy of continually prioritising visions of change over continuity or, indeed, sustainability (2004, p. 36).

The website introduction to *The Planning and Compulsory Purchase Act 2004* (<http://www.planningportal.gov.uk/wales/government/news/comment/inanutshell/planningandcompulsoryact>) confirms that this law is intended to facilitate 'LPAs, joint planning boards and National Park authorities [in making] a case for CPOs where it will be of economic, social or environmental benefit to [an] area.' It also confirms a 'widening of the category of person with an interest in the land who can object' and details procedures relating to owner compensation. Whilst these measures thus serve to increase levels of accountability to and power for local groups potentially impacted by large scale redevelopment proposals at an early stage in their processes, the question of who determines what the 'benefits' of a CPO are long term and to whom is left open. Furthermore, the use of local 'expertise and knowledge' merely for the purpose of raising objections but not explicitly in terms of envisioning or planning for change would appear to be of questionable significance.

The following section considers how the pre-Olympic site communities have been both conceptualised and handled through public engagement processes relating to the 'Compulsory Purchase' of the Olympic site by the London Development Agency and the development of a land-use strategies for their relocation.

Communities, Consultation and Compulsory Purchase of the Olympic Site

Numerous accounts and assessments of the Olympic site and its locale prior to the commencement of demolition represent it as economically, socially and environmentally depressed, reflective of decades of underinvestment, 'one of the most deprived in the UK and Europe'. The Lower Lea Valley is said to suffer 'from high unemployment and low skills', to have 'one of the worst public health records in the country' and 'three of the [five] Olympic Boroughs contain the third, fourth, and eleventh most deprived wards in the country' (Ryan-Collins and Sander-Jackson 2007, p. 20). Capita Symond's *Environmental Statement 2004* on the site highlights the degradation and contamination of its landscape by waste and chemical industries. Such accounts are used to underpin the case for comprehensive 'social, economic and environmental renewal [that lie] at the heart of the London 2012 vision' (Ryan-Collins and Sander-Jackson 2007, p. 20).

The London Development Agency (LDA) was endowed with statutory power to compulsorily assemble the land designated for the development of the Olympics under the *Regional Development Agencies Act 1998*. The 'assembly' of land forming Olympic site involved two separate Compulsory Purchase Orders. The first was a *Power Lines CPO*, confirmed by the Secretary of State for Trade and Industry on 4th April 2005. The second, relating to all property interests, was the *Lower Lea Valley, Olympic Legacy Compulsory Purchase Order 2005*, confirmed on 18th December 2006. In interview, an LDA representative confirmed its intention to avoid falling under the kinds of criticism levelled at the London Docklands Development Corporation (LDDC) in the 1980s hinging on the lack of opportunity offered to local residents, many of whom were former dock workers to benefit subsequently from enormous profits accruing through the redevelopment of the Isle of Dogs (Hall 1998). This representative also argued that the LDA purposefully sought to avoid generalising the 'needs' of different groups' in order 'to come to a better solution [and] make sure that they're sited in the best place' (Interview, LDA 14.08.08). It thus endeavoured to avoid having to draw down CPO powers by negotiating towards 'private agreements' for relocation with each legal occupant. The LDA's website reports that a major advantage of negotiation is that solutions can be 'found to the satisfaction of all parties - making relocation [and compensation]

a real opportunity'. The LDA's 'Relocation Strategy' explains the structure of financial and advisory support and compensation available to these occupants including 'offer[ing] landowners a market value for their sites' (LDA 2004, p. 10) and like for like recompense for lost accommodation and unsalvageable equipment. The Government's planning portal reports that this compensation, translated as a cost for acquiring the land for the Olympic site, amounted to around £750 million. Arguably, in these terms, the LDA's approach, developed as they confronted the heterogeneities of 'need', went beyond requirements at national level.

In spite of this deliberative approach to land purchase, a number of occupants, most prominently - though not without exception - the non-business users strongly objected to the settlement terms they were offered and to the ways in which their community 'needs' were assessed (Figure 2). In 2005, the Secretary of State for Communities and Local Government announced that a Public Inquiry would be held before it confirmed the CPO. This was subsequently held between May and August 2006. In a bid to minimise the number of representations at the hearing, the LDA accelerated its negotiation processes with land-owners, producing 'a flurry of eleventh hour relocation deals' (Milne 2006). By the time the hearing commenced, 90% of the land was in the LDA's possession and 70% of the jobs on the site safeguarded, leaving a relatively small number of individuals still objecting. This significantly weighted the outcome in the LDA's favour. Also significantly influencing the outcome was the unmovable timescale for the development of the site for the Games. With the Olympic bid won, the LDA were obliged to deliver a vacant site in July 2007. This timescale was met, despite negotiations with several users remaining incomplete.

Interviews conducted in 2008 focused on developing insights into how some of these former users experienced the Compulsory Purchase Order and the process of developing a strategy for their relocation. Answers to interview questions revealed a spectrum of understandings — that clash with official accounts — of the motives behind the CPO, the meaning of 'sustainable communities' with respect to the CPO and the effectiveness of consultation or negotiation as means for delivering them. Their objection to the language of 'sustainable communities', as indicated below, often related to the sense that their social groups were not adequately understood nor valued as 'communities'.

Respondents argued that the LDA's conception of 'community' was reductive and suggested that this became reflected in their failure to accord certain groups with the same level of respect as others. As a representative from the residential group at Clay's Lane argued, 'The LDA see communities [as] very special groups, i.e. you're an ethnic minority of some kind [so] the Travellers have



Figure 2. Gardeners' Protest. (Martin Strickland. Flickr)

a particular designation. To my mind, they don't actually have a concept of community outside of that very narrow definition'. He claimed that a major reason why negotiation with his group became protracted was 'because we kept on going on about the fact that we wanted community moves' against the LDA's apparent keenness to disperse members to different locations. A representative from the Eton Manor Gardening Society also suggested that the LDA were resistant to viewing her group as a community. She relayed how she kept insisting in negotiations with the LDA that 'we're a community, we're an old one and [...] we go back two or three generations'. The question of whether plot holders could be relocated together or have to be dispersed among existing allotments sites around East London relied on the LDA agreeing that they were a community. She reported that the LDA's position in relation to this was "you're not allowed to do that" - this because we're not relatives, we're not, you know, real neighbours, we just garden alongside each other'. As a result of being pushed toward defending a community position, she surmised that, 'I think that what a lot of people find themselves doing [is] just kind of disappearing into the ether', rather than taking it on. A representative for the Waterden Road Travellers gave the impression that, while her community was acknowledged by the LDA, the significance of losing her home where 'we were very, very much at home' was not for some time.

For each of the interviewed groups, the total transformation of the former site underscored their scepticism of the Government's aim to create a 'sustainable communities' Olympic Legacy. A representative from the Eastway Cycle Centre questioned the meaning of the term, as follows:

They don't use the words "sweeping away", they don't say "neighbourhood cleansing", stuff like that. They say, "regeneration", they say, "new opportunities", they say, "sustainable

communities", all of that sort of tosh, which, actually for the people who're being most directly affected by it, just is nothing but bad news.(Fieldwork Interview 2008)

For the director of the smoked salmon producer, H. Forman and Son, terms 'sustainable communities' and 'regeneration' are employed to conceal that the CPO was merely instrumented in order to provide a vacant site for the Olympics. He suggested that:

The grounds on which they were making the CPO were completely false and invalid [...] They didn't have the power to compulsory purchase the land for a sporting event. They didn't have the legal powers to do that. So they did it in the name of "regeneration". (Fieldwork Interview 2008)

For him, 'the tragedy', which the current credit crunch only serves to underscore is 'a national thing really [lying in] that they didn't value manufacturing. This was the greatest concentration of manufacturing land in the whole of London - being wiped out for three weeks of sport!' Forman argued that delivery time was critical for his business in sustaining a niche in city's food industry, enabled by easy access to Central London's hotels and the House of Commons. For him, as for many small business owners, the combination of an un-regenerated site implying low property overheads combined with its inner-city location was strategically important given the competitiveness of national and international markets. For the Clay's Lane residents' representative, the demolition of mature allotments flew in face of sustainability agendas regarding the provision of locally grown food in the city. For the allotments' representative, it seemed to point to failure in the LDA's understanding of how to create 'sustainable communities', for which time and continuity are of the essence. As she put it, 'I mean [...] here we've got this organisation who are talking about sustainable communities being the legacy and then at the same time talking about dispersing us, a ninety year-old community, all over the place!'. The Clay's resident echoed this, saying:

I mean to me, this stuff about sustainability [...] I just can't take it seriously because, if you're looking at a programme which is meant to be delivering benefits to the population at large, surely the first people you deliver benefits to are the people who are directly affected! (Fieldwork Interview 2008)

For the Traveller's representative, creating 'sustainable communities' should involve trying 'to help more homeless people [...] and trying to make more jobs and more careers for people. Instead of even ever bidding for them Olympics from day one, why not—with money for the London Games that they had — put it in something better? It's only lasting for six weeks!' Asked specifically what she thought of the Mayor's 'Legacy Commitment' to make the Olympic Park a 'blueprint for sustainable living', she responded, 'It's a lie [...] it's common knowledge. The credit crunch [...] there's hundreds of thousands of people that's out of jobs at the moment, that they're queuing up at Jobseekers'. For her, these present realities suggested the ultimate un-deliverability of this commitment.

The fact that the development of the Olympic Park on the site was non-negotiable from the time that the bid was won has significantly, if variably, coloured perceptions of former user groups on the site of the roles they had in the process. As the Eastway Cycle Centre's representative argued that 'a lot of the consultation stuff was just not asking the questions, it was putting the questions in a way to get the answers you want'. For him, a major step forward in his groups' campaign happened when 'we were able to demonstrate that there was a viable community there but that community had not been consulted with in any way, shape or form and that they should jolly well get that sorted'. The director of H. Forman and Son argued that the process was more dismissive of local people's objections than other large-scale development processes, even other controversial ones:

Unlike most Compulsory Purchases where these things go to Public Inquiry—you know, Terminal 5: four hundred objections, it took five years—here you had four hundred objections, it took six weeks because you can't have the 2012 Games in 2016! (Fieldwork Interview 2008)

However, the Traveller and Clay's Lane group representatives argued that a problem with the negotiation process was not lack of engagement from the LDA but excessive, unproductive communication, producing what is known colloquially as 'consultation fatigue'. The Travellers' representative added that what bothered her was not the relocation *per se* but the time it had taken to reach agreement on it. The allotments representative argued that a major problem for her group was that, in spite of having the opportunity to negotiate in unthreatening spaces such as local cafes, so many people 'would be so cowed by authority that they would just agree to anything'. She argued that this was because the LDA's key concern was not to establish how best to 'sustain' this community, but what minimum would be required to make them go quietly. To this extent, consultation seemed a token democratic gesture, belying the decisions that had already been made. The Eastway Cycle Centre's representative said:

So anybody starting now to look at the planning process, I think, I hope they will realise that . . . if you want to have a community-orientated planning system, first talk to the communities that are there. Sure, have your own conception of what you want, *but* . . . (Fieldwork Interview 2008)

Each of the representatives argued that the power imbalance between them and the LDA meant that recourse to support from external agents—whether in the law or media—became an essential negotiating tactic. Owing to the energy and commitment of a number of plot holders, the case of the allotments drew particular support in the national press as well as from social commentators such as Iain Sinclair, and restaurateurs Rick Stein and Sam Clarke and became highly publicised. The allotments' representative was of the view that 'those groups that in a way were more successful for various reasons [...] were those that managed to engage the media, they were the Travellers—the Gypsies—and us. And the reason for that is that we were both highly political areas. We were riding on a wave of, well, green sustainability'. The Waterden Road Travellers' representative reported that while on a number of occasions they felt that their privacy was being infringed by journalists wanting to capture and make use of their story, interest in their plight—which led to a High Court hearing—ultimately advanced their position. The representatives also each claimed that social ties between groups were strengthened by the common aim of opposing the LDA's proposals during 2005 and 2006. As the process wore on, certain members of these groups began to pull apart. However, others remained strengthened, participating in active demonstrations of solidarity on the site in the run-up to its closure in 2007. Allegedly, all negative propaganda was promptly pulled down, seeming to reflect the assertion of law and enforcement over public opinion and suggesting that even the right to objection legitimated in CPO law is only so within certain contexts.

In spite of the LDA's emphasis on communication with user groups, outcomes of consultation were perceived in variable lights. For some businesses, the strategic relocation of their activities and 'market value' compensation was adequate and advanced their situation. One of the former waste businesses reports on the LDA's website that '[w]e're delighted with our new premises, as they allow us to develop our business in a way which would not have been possible were it not for the Olympic Games'. For other groups, particularly the residential groups and allotment holders, it was not 'market value', but relationships, established over time within their group and with their sites that were important. For the director of H. Forman and Sons, 'market value' is, like 'sustainable communities', a tricky term that discounts the amount of time required for negotiating with

the LDA, the disruption of economic activities through relocation and the effects of relocation on staff. For him:

[t]he problem with Compulsory Purchase Law is that you're not allowed to benefit from the reason why you're being acquired. You're not supposed to be worse off, but you're not *allowed* to be better off. (Fieldwork Interview 2008).

In spite of this, the site to which his firm has been relocated, a stone's throw away from the Olympic stadium and closer to the city clearly presents advantages in the long term. The Eastway Cycle Centre's representative was dismissive about 'market value' saying that 'it's all just part of the funny money that goes around with the Olympics'. For him, the position of the cycle centre within the broader pre-Olympic site was relatively insignificant. What drove the centre's campaign was desire to promote their sport within East London and create the best opportunities for their club members to excel in 2012. The site to which they have been relocated is considerably better than their former home, though they claim that this is only by dint of an exhausting campaign. The Clay's Lane representative described how he ultimately failed to reach a negotiated solution for the relocation of his dwindling group and wound up accepting terms for individual relocations to neighbourhoods bordering the site. At the Public Inquiry, the allotments representative objected to the CPO on the grounds that the loss of their site would catalyse the breakup of their community. Although the correct number of sixty seven plots were offered as replacements for those lost, a series of factors - proximity to a busy road, a standard layout of sheds, a different soil - have conspired to sever ties between community and land. The Travellers' representative reported that their relocation to three separate though proximate locations was ultimately positive - 'we got good out of it, but really' - as each of these groups now includes a smaller number of families who have things in common with each other and their bespoke, brick houses allow them to feel more established and legitimated within East London. In spite of this, the thirty five Traveller families, at the time of writing, await completion of these houses and, in the meantime, continue to camp on the Olympic construction site.

Conclusion

The broad aim of this paper has been to examine the relationships between stated or worded aims of contemporary policy geared to delivering 'sustainable communities' and outcomes of specific processes in which this may be seen to unfold. In the context of the 2012 Olympic Park, the paper particularly explores the relationship between consultation and compulsory purchase, two tools advocated concurrently for the delivery of 'sustainable communities' in contemporary policy. The first part of the paper considered how the link between these tools is articulated in the ODPM's *Sustainable Communities: Building for the Future* policy in particular, and highlighted issues arising from this in relation to recent research. The tendency in 'sustainable communities' policy to link 'communities' with local places can seem to ignore the varied ways in which community groups actually form and cohere and to downplay the complex relationships between specific communities of interest or affiliation and broader society as constituted at a range of spatial scales. However, recognising that community is a fundamentally 'heterogeneous' entity - comprising intimate, focussed, specific communities of interest as well as places, neighbourhoods and localities - poses significant challenges for consultation as a strategic mechanism.

In the substantive portion of the paper, I considered the role of consultation in the CPO of the 2012 Olympic site and the effects that the ultimate process of relocation of former occupants had on five community groups that inhabited it prior to July 2007. The LDA's approach did not treat the users of the site as a homogenous community, but endeavoured to address the needs of different groups through specific negotiation processes. In many respects, this was successful, resulting not only in the LDA not having to draw down their CPO powers, but in terms of the ongoing financial viability of most businesses. Of the 274 businesses on the site, 210 relocated successfully to new premises. Notwithstanding, some of the groups who most struggled to negotiate an outcome they felt was satisfactory reveal some interesting difficulties with definitions of 'community' and with the tools advocated for their delivery.

The experiences of consultation of former occupants reveal a number of understandings of 'community', of the motives behind the CPO and of outcomes from it. Given the pressures to deliver the Games to an immovable timescale, they raise a question of how consultation with the smallest stakeholders can be more than token, worth the investment of energy and funds that it doubtlessly absorbs. Whilst it appears paradoxical that a process aimed at delivering 'sustainable communities' in the long-term should, in the short to medium term, involve suspending local activity and use on the site for seven years in order to create the setting for an international sporting event,

it also remains uncertain who the beneficiaries, the 'sustainable community' of the envisioned 'Legacy' will be. Will they be large-scale developers and wealthy city dwellers, whose interests lie in creating an exclusive enclave in the midst of the evolving social diversity and complexity at its fringes? How could they, otherwise, include a broader social and economic mix, becoming a 'blueprint for sustainable living' in an inclusive, 'heterogeneous' and more empowering sense? The LDA have certainly emphasised the need to create ongoing opportunities for the public to be involved in decision-making and 'community'-building exercises in the development of the spatial framework and economic models for 2012's Legacy. Watch this space.

References

- Agyeman, J. and Evans, T. (2003) 'Toward Just Sustainability in Urban Communities: Building Equity Rights with Sustainable Solutions', *Annals of the American Academy of Political and Social Science*, 590, Rethinking Sustainable Development, pp. 35-53
- Edwards, C. (2008) 'Participative Urban Renewal? Disability, Community, and Partnership in New Labour's Urban Policy', *Environment and Planning A*, vol. 40, pp. 1664-1680
- Frug, G. E. (1999) *City Making: Building Communities Without Building Walls*, Princeton, N.J.: Princeton University Press
- Greater London Authority (GLA). (2007) *5 Legacy Commitments*
- Hall, P. G. (1998) *Cities in Civilization: Culture, Innovation and Urban Order*, London: Weidenfeld
- Imrie, R., Lees, L. and Raco, M. (2008) *Regenerating London: Governance, Sustainability and Community*, London: Routledge
- Imrie, R., and Raco, M. (2003) *Urban Renaissance?: New Labour, Community and Urban Policy*. Bristol: Policy
- Imrie, R., and Thomas, H. (1989) 'Urban Redevelopment, Compulsory Purchase, and the Regeneration of Local Economies: The Case of Cardiff Docklands', *Planning Practice and Research*, vol. 4, no. 3, pp. 18-27
- Imrie, R. and Thomas, H. (1997) 'Law, Legal Struggles and Urban Regeneration: Rethinking the Relationship', *Urban Studies*, vol. 34, no. 9, pp. 1401-1418
- International Olympic Committee Evaluation Commission. (2005). *Report of the IOC Evaluation Commission for the Games of the XXX Olympiad in 2012*: International Olympic Committee
- Lees, L. (2003) 'Visions of 'Urban Renaissance': the Urban Task Force Report and the Urban White Paper', in R. Imrie and M. Raco (eds.), *Urban Renaissance? New Labour, Community and Urban Policy*. Bristol: The Policy Press
- Livingstone, K. (2003) 'We Must Go for Gold with London's Olympic Bid', *The Guardian*. <http://www.guardian.co.uk> [Accessed 15 January 2009]
- London Development Agency (LDA). (2004). *Olympic Park Relocations Position Statement*, London: London Development Agency
- Milne, R (2006) Olympics CPO hearing underway. <http://www.planningportal.gov.uk/england/professionals/en/1115314064356.html> [Accessed 15 January 2009]
- Office of the Deputy Prime Minister (ODPM). (2005) *Planning Policy Statement 1: Delivering Sustainable Development*. London: Office of the Deputy Prime Minister.
- Office of the Deputy Prime Minister (ODPM). (2003) *Sustainable Communities: Building for the Future*, London: Office of the Deputy Prime Minister
- Raco, M. (2004) 'Whose Gold Rush? The Social Legacy of a London Olympics', in Vigor, A., Mean, M., Tims, C., Institute for Public Policy Research (London England), & Demos (Organization). (2004), *After the Gold Rush: A Sustainable Olympics for London*. London: IPPR
- Raco, M. (2007) *Building Sustainable Communities: Spatial Policy and Labour Mobility in Post-War Britain*, Bristol: Policy Press
- Sennett, R. (1973) *The Uses of Disorder: Personal Identity and City Life*, Harmondsworth: Penguin
- Sennett, R. (2002 [1977]) *The Fall of Public Man*, London: Penguin
- Smith, M. (2008) 'Sustainable Communities and Neighbourhoods: Theory, Policy and Practice', in *The Encyclopaedia of Informal Education*. http://www.infed.org/communities/sustainable_communities.htm [Accessed 15 January 2009]
- The Compulsory Purchase Act (2004) London, Her Majesty's Stationery Office (HMSO)
- The Sustainable Communities Act, (c.23) (2007) London, Her Majesty's Stationery Office (HMSO)
- Vigor, A., Mean, M., Tims, C., Institute for Public Policy Research (London England), & Demos (Organization) (2004), *After the Gold Rush: A Sustainable Olympics for London*. London: IPPR

II. Writing history through artefacts

4. **Writing Urban Stories from the Walls of a Building: The Case of the Post and Telecommunications Palace in Buenos Aires**
Cecilia Dinardi
5. **The Canal in the City of Gardens**
Nida Rehman
6. **The Mughal Pavilion**
Ninad Pandit and Laura Lee Schmidt

4. Writing Urban Stories from the Walls of a Building: The Case of the Post and Telecommunications Palace in Buenos Aires

Cecilia Dinardi

How should one go about writing a city like Buenos Aires? Stereotypical portraits of the city in promotional materials frequently focus upon its resemblance to Paris, its cosmopolitan and sophisticated character, its great culinary variety, and its vibrant culture. European architecture, marvellous wine and unbeatable steaks are brought together with diverse cultural activities to depict and sell a particular image of Buenos Aires. Without doubt, there are different, innumerable approaches from

which to examine cities. One interesting way of exploring the urban is focusing on the city's material culture, the whole series of diverse objects that have been created by human work and whose existence shapes and mediates human behaviour. Traditionally, urban archaeology has been concerned with deciphering the past of cities through its engagement with material remains with the aim of analysing objects in relation to society. Material culture not only includes small artefacts of ordinary consumption,



Figure 1. Correo Central with its plaza as it is today. (Dinardi 2009)

such as clothes, media, and food, but also encompasses larger objects, such as buildings and entire cultural landscapes. In the process of writing about cities, buildings become significant sites whereby to explore particular aspects of the city, its history and daily life. At a physical level, they perform practical functions, contributing to the daily reproduction of social life. At a symbolic level, their materiality embodies meaning: as the objectification of architects' and builders' work, as well as the result of planning regulations and sometimes policy proposals, buildings possess great power to represent, and in doing so, they shape social interactions and local landscapes.

This paper offers a methodological exercise in relation to the study and writing of cities: by approaching Buenos Aires through the examination of one of its iconic buildings, the Palacio de Correos y Telecomunicaciones (Post and Telecommunications Palace). Located in the city's downtown, it is Argentina's national post and telecommunications office. This Beaux Arts style structure has been listed as a "National Historical Monument", and is thus protected by national law and safeguarded by a heritage custodian. Familiarly known as *Correo Central* (hereafter, I shall use this name to refer to the building), it is famous for hosting Evita's office during former president Peron's first administration (1946-1955). However, the building's significance at the level of the city's everyday life goes beyond this particular historical fact: its landmark status makes it appear on bus and underground signs, for its location functions as a terminal station. Its feature as a singular physical object, as an easily identifiable point of reference, makes it one of those buildings which a local rarely does not know.

Correo Central is located in San Nicolas neighbourhood, in front of the government house (Casa Rosada) and its square (Plaza de Mayo), next to a sports and cultural stadium (Luna Park) and adjacent to the trendy waterfront developments (Puerto Madero). The building has become part of a sequential series of landmarks that help people travel through the city, facilitating recognition and memorisation (Lynch 1960).



Figure 2. Map of Buenos Aires' central area showing *Correo Central* and its neighbouring landmark buildings. Coloured lines represent the underground. Author's composition upon a city map from Mapa de la Ciudad Autónoma de Buenos Aires. (<http://mapa.buenosaires.gov.ar>)

The aim of this paper is to explore what this particular building might tell us about the city in which it is embedded, by undertaking a journey through different historical periods, departing from its origins, stopping in its present, and arriving at its projected future – that designed by new redevelopment proposals. In doing so, I reflect upon the process of writing cities, while narrating two stories about the building, stories that in fact encompass the city, and to some extent, the nation as a whole. These are stories that, although presented in a chronological order, are not meant to

cover whole historical periods³, but rather, are informed by some of the transformations experienced by the building throughout two periods in its history. Even though an account of the city's history from the nineteenth century onwards would allow for a deeper contextualisation of the topics explored here, it is beyond the scope of this paper.

Why a building?

Studying a city from "the walls of a building" may appear fragmentary, if not methodologically reductionist to the sociologist. But the strength of this methodological exercise lies, not in its geographical scope, but rather, in the encounter of urban stories that are facilitated by the materiality of the building. Like the inescapable circulation of users, the uses of buildings are transformed in their history: they are recycled, preserved, squatted, demolished, rebuilt, abandoned. Therefore, a city itself can be defined as the persistent change of function of buildings (González 2006, p. 24) that at different historical periods shape the city's aesthetics in diverse ways. The materiality of the city, as expressed in its urban objects such as streets, buildings, squares, and bridges, reveals the traces left by previous urban planning regulations alongside belief systems and social practices that have configured the particularities of its architecture. These physical structures are the result of collective practices that were historically and politically located, contributing also to their reproduction. Buildings can be conceived of as urban artefacts that are constitutive of the architecture of the city which, at the same time, implies the construction of the city over time (Rossi 1982). Rossi's notion of urban artefacts is significant in highlighting the importance of the singularity and individuality of these parts or moments to the understanding of the city's whole: The difficulty in analysing and defining them lies in the ambiguity of language and the existence of a plurality of experiences and standpoints of those who "live" differently the same artefact (Rossi 1982, p. 33). Indeed, the examination of these particular urban objects, framed within the context in which they were born, received, and transformed, enables the study of a number of political, socio-economic and cultural questions concerning the wider city space.

So what might a specific building tell us about the city? Clearly, the answer to this question will vary depending on the type of building we are referring to, since different buildings may reveal distinct aspects of the city. Yet establishing the extent to which these aspects would be limited to the city or would unveil features of the society as a whole proves to be a difficult task to undertake. A church, for instance, may express religious beliefs and practices, a cemetery may convey cultural values relating to death as well as hygiene operations, and a mental hospital would

express patterns of social order. As Foucault's work has shown (Foucault 1975; 1979), prisons and mental hospitals become useful sites through which to analyse disciplinary society's attitudes towards sexuality, madness, and crime, revealing specific politics of health, punishment and social control. Clearly, the study of such material objects refers more to a society demarcated within a historical period than to the geographical space in which they are embedded.

Nevertheless, there are a number of examples in which a specific geographically situated single object can be employed as the point of departure to develop wider sociological insights. In his analysis of the Rothschild Buildings in East London, Whites (1980) offers a relevant example of the use of a single building to conduct an incredibly rich analysis of the area in which the building was embedded alongside the community that inhabited it. In a similar line, a close study of the Eiffel Tower in Paris enables Barthes (1979) to discuss questions of national symbols, meaning and modernity, tourism, and consumption. He points out that the Tower functions as the centre and Paris as its circumference and in this city-object relationship a new category of perception emerges: By offering a panoramic view, the Tower invites visitors to decipher the city by means of producing a mental simulacrum of Paris. Yalouri (2001) also highlights the significance of studying one singular site with the aim of exploring different aspects of the city and the nation: Her examination of the Acropolis historic site as a mobile and multiple situated monument allows for an analysis of the negotiation of national identity and power and the local and international meanings shaped by the site. As these studies show, one single object, one particular building or icon, can become a valuable tool for producing specific knowledge about the city. Drawing on these works, it could be said that buildings might disclose specific aspects about the city when analysing: a) the function they were meant to serve in the context of their birth; b) the uses they actually possessed; c) their architectural style; d) the impact they may have had on a particular social context; e) their current physical state; and f) their representational character or symbolic aspect. An examination of all these different dimensions would enable the identification of larger features of the city's development and transformation that might be revealed by buildings. Two different urban stories, then, are recounted here, focusing on the aforementioned aspects.

These stories are narrated by me, an Argentine sociologist who has passed by the façade of the building innumerable times over the past years. I have walked the site extensively and recently undertaken a guided-tour to the building's interior. Usually one would go to the site either to post a letter, wait for a bus or take the underground. However, the close proximity to the government house and the Work Ministry may make one's journey by car or bus impossible: Innumerable demonstrations by different

piqueter organisations would block streets, divert traffic, and their reasonable demands for justice and better salaries would turn traffic movement into absolute chaos. This site belongs to one of my memorable city landscapes, as it is located near the historic district where I have always lived. Different sorts of materials, such as newspaper articles, interviews and visual material, have informed this writing which intends to express my concern about the city's politics of heritage in view of the new urban developments planned for the 2010 Bicentenary commemorations.

One of these developments is the proposed re-functionalisation of Correo Central into a cultural centre. The project entails large-scale structural intervention, including the demolition of part of the building's interior, the glazing of the dome, and the regeneration of the surrounding area. Even though the proposed transformations have been celebrated by policy-makers and some architects, they have found neither enthusiasm nor much support among heritage advocates, workers, and journalists. As this listed building constitutes one of the flagship projects of the official commemorations, its past, present and future are being negotiated, reflecting the contested character of heritage in contemporary cities.

An examination of the transformations experienced by the building itself can reveal wider processes affecting the city as a whole, and in some cases, the nation-state. The crystallisation of these processes in the materiality of the building offers an interesting site to reflect on the ways we approach cities and portray them in writing. Stemming from Hayden's (1995) notion of the power of place, understood as the power of ordinary urban landscapes to nurture citizen's public memory, the power of buildings could be said to be mnemonic in being representational. Buildings have the potential to be carriers of meanings, containers of memories, and triggers of commemoration. As meaningful architectural works of art, they alter our environment physically and inform and reorganise our entire experience through their various avenues of meaning (Goodman 1985). Hence, in the power to represent, the control over that representation is usually at stake in the battle over the creation, preservation, uses, and transformation of buildings. As such, they have historical significance and can inevitably be appropriated through their perceived cultural heritage status in order to strengthen certain political identities (Steward and Strathern 2003)

In Argentina, disputes over building memories and the memories of buildings have been epitomised by the debate over the re-functionalisation of the ESMA, the Navy Petty-Officers School of Mechanics. During the 1976 to 1983 dictatorship the "school" was used as one of the bloodiest detention and torture centres where thousands of people were tortured and killed, especially

pregnant women whose children were then illegally adopted by military families. After much debate over how to re-signify a space of death and terror, the building now functions as a cultural centre aimed at promoting people's memory and human rights². Buildings can be very important in reinforcing political communities; they are intersected with different memories, place identities and public meanings, and are therefore the subject of conflicts and struggles. This contestability, arising from the clash of different interests with respect to buildings, is precisely what makes them a relevant site for sociological inquiry, as the following stories will illustrate.

First story: The birth of a new nation

To narrate the story of the post office in America is to narrate the events that followed the conquest and colonisation of our continent.³



Figure 3. Buenos Aires' central area. (Museo Postal y Telegráfico. Digitalisation: CeDIAP)

Buenos Aires, November 1912: Water, bricks, construction materials, fences. A sense of vacuum in the city's centre, but also of triumph, after having reclaimed these lands to the *De La Plata* river. 1912: the year of the first "universal", secret and mandatory suffrage in Argentina - although only thirty five years later women would be included in that universe. 1912: one year before the first subway line was inaugurated in the city, and two years after the Argentine Nation's Centenary commemorations took place.

The illustration taken by the Ministry of Public Works shows the site upon which Correo Central was later built. The function of this building was to host the first central post and telegraph office of Argentina in view of the increasing development of national

and international communication networks. Given Argentina's extensive geographical territory, the post office served a crucial role in integrating isolated parts of the region, fostering the development of towns and transport connections around postal routes, and enabling people to communicate across the country and abroad.

At first sight, the post office in Buenos Aires already reveals a distinctive story about the city and the country as a whole: The story of the birth of a new nation, a story where the postal service as an institution played a fundamental role. The existence of the postal service in Argentina can be traced back to colonial times under Spanish rule. The first Major Courier of the Indias was established in Lima in 1514, and the first regulations on postal communication in the region of the Río de la Plata were published in 1715⁴. The city of Buenos Aires was founded twice: in 1536 and 1580. With the first foundation⁵ the city was a block long, which was then destroyed in 1541. The second foundation gave the city its first council, square, church, fortress, 25 blocks, and lots distributed for agriculture and cattle farming, as established by the Indias Laws, a set of legislations to regulate social, political, religious and economic life in the conquered lands. The city was then organised around its Plaza Mayor.

By 1748, Buenos Aires had its first ordinary mail service. To organise a service of sea and land communications between the Court and the colonial governments, Spain appointed sea mail administrators for the ports of its overseas colonies. Originally, a postal service was provided in the capital city in the form of relay posts. Postmen used to go from one relay post to another, using horses which were borrowed from neighbours of the area. With the creation of the Viceroyalty of *De Río La Plata*⁶ the post office was further developed as an institution. As Buenos Aires' port was strategic for military control, the city became the viceroyalty capital, serving key political, administrative and commercial functions.

The post office is said to have played an important role in major historical events, such as the English invasions in 1806 and 1807, the May Revolution in 1810, and the Independence from Spain in 1816. It served "an indispensable role in the birth of nationhood, taking First Assembly reports and orders, disseminating notices with the May (Revolution) ideas"⁷. For instance, during the Open Council of the May Revolution, blue and white rosettes were distributed as patriotic symbols among the crowd by postmen; and one of the first postmen of the country was a leading agitator of the revolution. During the wars for independence the post office played a decisive role in facilitating communications for the organisation of the armies that were to fight against the royalists. It is seen then as "a modest and sometimes unsuspected protagonist of patriotic history" (Bose and Saenz 1994, p. 73).

During its early years, the postal service occupied the private mansions of the Administrators of Mail Services. But the increasing importance that the post was acquiring led the government to commission the Swedish architect Carlos Kihlberg to erect a building for the post. Casa de Correos⁸ was then inaugurated in 1878 next to the government house. Sixteen years later, President Roca maintained that the building overshadowed the government house, so the former was incorporated into the latter through a central arch created by architect Francisco Tamburini. The need to erect a new building for the head post office was suggested later to the government by Ramon J. Cárcano, Major Courier. He suggested the use of strategic lands demarcated by the port, the train terminal station, and the government house.

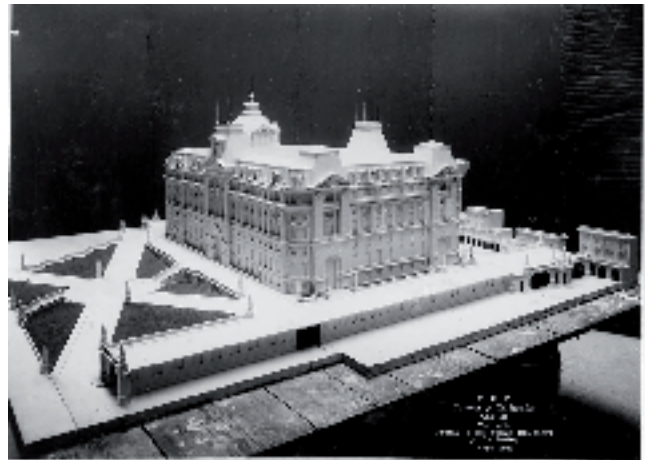


Figure 4. Model of original building. (Museo Postal y Telegráfico. Digitalisation CeDIAP, photograph by the Ministerio de Obras Públicas (M.O.P.), 1913)



Figure 5. Building foundations (Museo Postal y Telegráfico. Digitalisation: CeDIAP, photograph by the Ministerio de Obras Públicas (M.O.P.), 1916)

These were lands that had been recovered⁹ from the De la Plata river by Sociedad de las Catalinas, a public limited company, which donated them to the government. City lands were very uneven, as indicated by the name given to this area: El Bajo (the Low), opposite to “the highs”, the city’s richest area and today’s underprivileged and trendy historic district, San Telmo. The French architect Norbert Maillard¹⁰ was commissioned to design a project for the post office in 1888. After studying postal buildings in New York, London and Paris, he conceived a neoclassic building project for Buenos Aires.

This project was approved in 1888, but only the foundations were built before works were interrupted due to the severe financial crisis and the fall of the government. This was the period in which a large number of public works, based on international financial lending, were promoted by the government to embellish the city. After fifteen years of interruption, the project proved to be outdated and architect Maillard designed a new project. Yet disagreements led to his resignation, and a new plan was drawn up by the Russian architect Spolsky, who conceived of a smaller scale project. Work commenced in 1911, but the unfavourable economic situation and the lack of construction materials accentuated by the First World War led to further interruptions, and then to a new restructuring of the project design. Finally, after forty one years, the Palace was inaugurated in 1928. It was built on a 12.500 m² land, and it has a total area of 88.050 m², 60m of height and 9 floors. Its architectural style is founded on calculation and proportion, including “noble” and utilitarian spaces. The building expresses traditional forms of *Beaux-Arts* academic architecture and modern technological aspects (Projecto CCB 2007).

The consolidation of the new nation-state in 1880s was to be represented in the solidity of monumental public buildings through colossal architecture that could help erase the Hispanic-colonial legacy which was simultaneously being demolished. With the federalisation in 1880, Buenos Aires became the country’s capital, and Argentina’s face to the world as “the Paris of Latin America”: avenues and streets were widened, parks and squares were created, and the city was in general physically embellished. Architecture can be instrumental to reinforce ideas of the modern: by offering the background against which modernity can be grasped as well as by developing into the active means by which the modern project can be manifested (Hvattum and Hermansen 2004). The so-called *Generación del 80* (1880s Generation) was shaped by an elitist bourgeoisie who ambitiously imagined a new national project sustained by their dreams of power that rested on the ideas of “progress” and “civilisation” as the pillars of the construction of “the new Argentina”¹¹. An agro-export model was the economic basis of this project: it was a projection of the nation shaped by “cows and grains”¹².

‘Modernity’ in conservative Argentina of the 1880s, then, appeared equated to these ideas through a uni-linear movement towards the future in an evolutionist fashion, and the future turned to be inexorably that of the European nations. In a clear correlation between modernity and enlightenment (Frisby 2004) movement in this ‘progress ladder’ was given by technological development and scientific reason, and was illustrated by the utilisation of French academic architecture aimed at highlighting the ideas of proportion, calculation, and order in the solidity of monumental public buildings. In this context, the construction of Correo Central in Buenos Aires sought to host the power of the nation state, configure the urban scene of a great metropolis, and compete through its architectural forms with other cities (De Paula 1988). It was aimed at embodying prosperous Argentina, as one of a series of buildings designed to represent a particular political and cultural vision, a specific national project. The building then arose as a symbol of political and economic power, as a bearer of ‘modernity’.

Not only did Correo Central become an identifiable icon due to its great architectural style, but its functioning was significant also as embodiment of the Welfare State. It represented the successful delivery of a key public service by the State as well as its interest in educating labour force and protecting workers’ social rights. Together with the provision of the postal service to Argentina’s large territory as the essential communications tool, a number of social services for postal employees were on offer. These included: a health centre with different medical specialties, a medical chemistry laboratory and an X-ray room, schools, a kindergarten, hairdressers, a cinema, a 10,000-book library with reading rooms, and a restaurant that served 3,000 people daily. In the nineteenth



Figure 6. Sculpture workshop at the Palace. (Museo Postal y Telegráfico. Digitalisation CEDIAP, photograph by the Ministerio de Obras Públicas (M.O.P.) 1921)



Figure 7. Pillar construction (Museo Postal y Telegráfico. Digitalisation: CEDIAP, photograph by the Ministerio de Obras Públicas (M.O.P.) 1913)

century, the Argentine State promoted migratory waves from Europe to populate the country, and these immigrants became part of the labour force that largely constructed Correo Central. Employees also benefited from various forms of training, such as sculpture and crafted basket workshops and a Morse system and telegraphy school. All of the different tasks of postal service were undertaken in the Palace. These services were based at the different floors of the building and were provided for all post office employees.

This was a story of the birth of a new nation, illustrated by the significance of a building whose heritage value goes beyond its French architectural style: it embodies history, popular culture and social capital. Correo Central was a production centre, not only because it was a communication hub where all correspondence was organised, managed and distributed, but also because the services it provided allowed workers to gain a wide range of skills that were then applied in the building. To work in this Palace meant not temporary employment but a position for life. Employees' learning, experiences and stories have been materialised in the fabric of the building: the very pillars that sustain it, the sculptures that adorn it, were all locally produced. The post office was more than just a State-owned company, it was an institution that aimed to represent federalism¹³, decentralisation from Buenos Aires, for despite being located in the capital city it served equally¹⁴ all provinces across the country, and enabled people to communicate, overcoming distance. It constituted a symbol of economic prosperity and communication development, and most Argentine families may have had a relative who has worked in the Palace, as my grandfather did¹⁵.

Second story: neglect, privatisation and the “cultural city”

Buildings are giant humans, patient and hollow. Sometime they will decide to talk.¹⁶

Correo Central has sumptuous decoration and four halls that constitute its “noble sector”. It also has an area defined by its operative aspect, workshop space with machinery and store rooms. It was considered the most luxurious building of its time, and since its inauguration, it hosts a postal and telecommunications museum that looks after its architectural heritage.

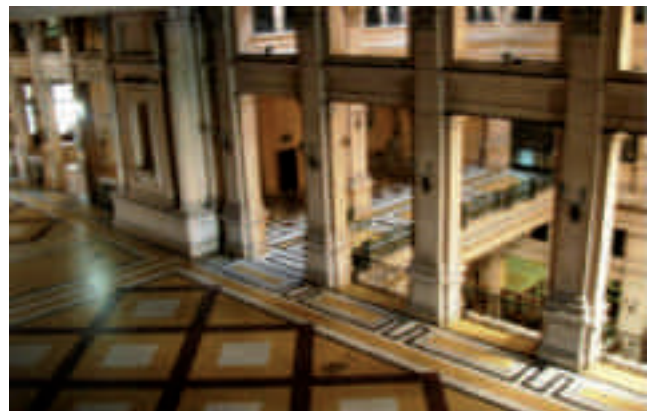


Figure 8. The interior. (Dinardi 2009)

This story considers the current status of the building, and begins with neglect. All previous years of economic prosperity and architectural grandeur associated with the building seem to have vanished in the last few decades. In spite of being a national historical monument – which indicates ‘protection of the totality of the building and preservation of its architectonic features, equipment and furniture, exterior and form’¹⁷, it has suffered from lack of care and renovation. Since its inauguration, it has never been restored¹⁸. The dome is losing its tiles that have started to blow off; there are leaks in roofs, paint flaking, and the external walls of the building look dirty, full of graffiti and rubbish. Far from being an exception, this is a clear expression of the general politics of heritage in Argentina, which is the result of decades of lack of funds, insufficient resources, neglect and vandalism. The absence of communication and coordination regarding heritage protection and conservation between the different levels of government only worsens the situation, especially in those cases in which national monuments are physically situated under the jurisdiction of the municipal government, as is the case with Correo Central.



Figure 9. Damaged interior of the Palace's dome. (Dinardi 2009)



Figure 10. Graffiti in the exterior walls of the building. (Dinardi 2009)

The methodical and merciless destruction of what remains of the country's past (Schavelzon 2008) is not new, and can be traced back to the *Generación del 80*, when the destruction of colonial past was a matter of State politics.

This story is also about privatisation. The fact that the Palace is a listed building is indicative of the need for it to be protected in the light of different threats of real estate developments. The designation of the building as a heritage site is said to have been

prompted by the intention of former President Menem to turn it into a shopping mall. The Menem administration (1989 -1999) was characterised by a privatisation fever, in which most State-owned businesses were sold to private corporations. This was the period of wildest neoliberalism in Argentina with the weakening of State ownership, the dollarisation of economy, the cutting down of public budget in all areas, massive sacking, rampant corruption, hyperinflation, and severe recession. In this context, the post office was given as a concession to the Grupo Macri¹⁹ in 1997. After the breach of contract by that company, former President Nestor Kirchner re-nationalised the service in 2003. This was part of a larger politics of nationalisation of public services which included the national airline and the pension scheme.

The growth of technological communications and the existence of a large number of private postal operators are said to have been responsible for the decline in the public postal service in Argentina, and are the commonly alleged reasons²⁰ for the need to re-functionalise the 'over-dimensioned' post office building. So what should become of an 'outdated', massive, listed building? The first competition for recycling Correo Central was organised in 2005. Even though Argentina has a long history of public architectural competitions, this was a very distinctive one, since it originated in a controversy due to odd circumstances (of favouritism). The former Economic Affairs Minister during a businessmen's seminar came up with the idea of creating a mega cultural centre in the building, 'similar to the Louvre Museum or the Pompidou', offering the work to the well-known Chinese-American architect Ieoh Ming Pei. Given the monumental character of the building and its strategic location, the Architects' Central Society (SCA), together with the Urbanism and Architecture Professional Board (CPAU) firmly opposed the private project and demanded the organisation of an open, public architectural competition. A competition of 'popular ideas' was then organised by the Ministry for Economic Affairs, and surprisingly among the three winners was the project presented by the vice Mayor, together with the son of the above mentioned architect and other politicians. A few months later, the Economic Affairs Minister resigned and a new international competition was announced and commissioned by the SCA. What these details show is the significance and contested character of Correo Central, for which a struggle of conflicting interests was unleashed.

A final international competition for recycling the building and transforming it into the Bicentenary Cultural Centre (CCB) was then organised in 2006 through the SCA. The competition also requested proposals for the transformation of the surrounding urban environment as a way of integrating the docks district and the government square. The first prize winning proposal was the outcome of the association of two established architectural studios of Argentina (B4FS Studio), and suggested vanguard

architecture and restoration works, including concert halls, exhibition rooms and auditoriums. The dome of the Palace was seen as the most emblematic point of the new cultural centre that would offer not only cultural activities, but also 'a symbol of national civic space'. This explains why the original idea was to glaze it, although objections from the heritage protection custodians did not allow it. For the surroundings, the proposal aims to regenerate the area by means of creating a Bicentenary Park, an Art Square and Bicentenary Gardens. According to its descriptive memory, the project intends 'to use the new



Figure 11. Projected CCB with glazed dome. (Courtesy of B4FS Studio)



Figure 12. Projected symphony hall of the CCB. (Courtesy of B4FS Studio)

cultural centre as a central piece to transform the area into a cultural-oriented hub', and become 'one of the biggest cultural centres worldwide', signalling 'the path of growth and cultural development for future generations'.

Another aspect of this story revealed by the CCB project is the existence of larger cultural and urban trends shaping the city's policy-making sphere. The widespread call for cultural activities to revitalise downtown areas is associated with the recognition of the power attached to cultural districts as tools for economic, social, and sometimes political revitalisation. Culture is more and more the business of cities and the basis of their

competitive edge (Zukin 1995). It would not be surprising that the vice Mayor and Economic Affairs Minister knew, when they envisioned a mega cultural centre in Buenos Aires' downtown a few years ago, how economically powerful cultural activities can be when managed in the form of cultural quarters or clusters. The fact that the original idea of creating a cultural quarter in the city arose from the Economic Affairs Minister -and not from the cultural field- is indicative of this "turn to culture" in the agendas of municipal and federal governments. It is interesting to see how the rhetoric of culture acquires significance in official



Figure 13. Projected Bicentenary Park, gardens and squares integrated with the government's square and Puerto Madero. (Courtesy of B4FS Studio)

speeches; how it is legitimised insofar as it helps to attain political propaganda, economic development, and urban integration. This instrumentalisation of culture is at the core of the CCB project and reveals some of the ways in which cultural policies are adopted in the city.

This story about a projected cultural city encompasses strategies of political revitalisation in the context of Bicentenary commemorations. Not only does the project expect to bring about a positive impact on the city's built environment, but it also envisions promoting 'an extended democratic sociability which enables encounters with the Other'. Thus, the transformation of the urban space is intimately related to an ideal of citizenship contained in the project. Regrettably, by now most public parks and squares in the city have been fenced in, in the name of security in a quick "fence-fever" to combat vandalism, leaving what has been called 'a fence heritage of 21km' in the city. Public green spaces are being reduced in the face of increasing real estate development. Such patterns of urban ordering transform the city's aesthetics and seem to be at odds with the desire to create truly public civic spaces.

Finally, the predictable ending of this story reveals set patterns of policy-making in Argentina: general postponement of public works, vast bureaucracy, opportunism, short-termism, and disorganisation. The CCB project is currently more than

a year behind schedule, or five years if one counts the initial idea announced in 2004. The widely proclaimed new cultural centre will not be finished by 2010, since refurbishment works would take more than fifty months, but have just started, due to the endless tendering processes, the lack of communication between the parts involved and the silence from the Government of the City of Buenos Aires regarding the transformation of the urban environment under its jurisdiction. This is detrimental to the crystallisation of the flagship of the bicentenary commemorations, which could be otherwise transformed into a white elephant. What this illustrates, then, is that although the expediency of culture for consumerism and tourism (Yudice 2003) seems to have been re-discovered in recent decades by local governments across the globe, long-term cultural planning in Argentina still remains unattended.

Paradoxically, this case also illustrates how powerful claims of design “in the name of culture” may destroy significant features related to the building’s cultural heritage. The CCB project plans to keep the façade of the building, preserve its halls, and demolish a vast area of its interior, the so-called “operative sector”, where all workshops and machinery used to be located. Despite the attempts to give the building its grandeur back with such an ambitious project, opposition to the future CCB is to be found among vendors, post office employees, heritage protectors, and other workers in the building, such as cleaners, security guards, and postal museum staff. The feeling that the original function of the building will be completely lost, and therefore, its link to the post office as an institution will vanish, is the main stated reason underlying opposition. The proposed new developments are seen as a threat to the architectural heritage of the building and as an explicit annihilation of its social and historical heritage, for it will destroy not the “noblest sector” of the building, but one that belonged to the post office employees: their working world. It is in this sense that the demolition of the building’s interior and its detachment from its original function would contribute to the destruction of its heritage, and therefore, to the erosion of some of the city’s memories in the face of a spectacular mega-cultural centre.

Conclusion

By examining distinctive aspects of a particular building, two different stories about the city have been recounted. Firstly, an initial look at the origins of Correo Central revealed a story about the re-invention of Argentina as a new nation at the end of the nineteenth century. Architects, planners, and designers tried to position new national architectural symbols imaginatively within a European framework of progress, civilisation and modernity, constructing colossal official buildings to overshadow and

replace the nation’s Hispanic-colonial legacy. In that context, the post office acquired a crucial role in terms of economic development, national integration and political revitalisation, for it was linked since its origins as an institution to the political history of independence. The second story about the building was, to some extent, representative of the general politics of heritage in Argentina that has been historically characterised by neglect, insufficient resources, and lack of interest from the State. Equally, it was the expression of the privatisation policies that shaped the 1990s when the post office was given to a holding company and then taken over by the State after the failure of private management. Finally, the new plans for the building were examined, while unveiling broader aspects of the city’s cultural and urban policy-making. Not only the city but the nation as a whole was encompassed in this story, which revealed general patterns of policy-making in Argentina. Finally, the risks of destroying the building’s heritage and therefore the city’s memories in the name of “culture” were discussed.

How can Buenos Aires be thought of? What does it mean to write about the city from the perspective of a single building? This exercise may have run the risk of being too fragmentary or inevitably partial. Evidently, the extraordinary complexity of a city can hardly be read through the particularity of a building. Nevertheless, this particular building has illustrated a range of different aspects of the city that interestingly mirrored its past, its present and plans for its future. It has raised questions of urban planning, architectural design, politics of heritage, work and workplace, commemoration, cultural development, regeneration, and national political symbolism. Correo Central then became a vehicle for thinking the city, for bringing together distinct aspects that intersect it with the nation-state and the society as a whole. In this sense, it proved to be a useful methodological device for approaching Buenos Aires; a means that served as an entry point to the city’s incredibly rich and multifaceted character. A building is not a city, we all know that. But the history of the latter can be contained in the materiality of the former. And in this sense, it can facilitate our understanding of the city in embodying its past, reflecting its present and projecting its future.

References

- Barthes, R. (1979) *The Eiffel Tower and Other Mythologies*, New York: Noonday Press
- Bose, W. B.L. and Saenz, J.C. (1994) *Correo Argentino. Una Historia con Futuro*, Buenos Aires: Manrique Zago ediciones
- De Paula, A. (1988) 'El Arquitecto Maillart y el Correo Central de Buenos Aires', *Summa Temática*, vol. 25, pp. 22-23
- Foucault, M. (1975) *The Birth of the Clinic: An Archaeology of Medical Perception*, New York: Vintage Books
- Foucault, M. (1979) *Discipline and Punish: The Birth of the Prison*, New York: Vintage
- Frisby, D. (2004) 'Analysing Modernity: Some Issues', in Hvattum, M. and Hermansen, C. (eds), *Tracing Modernity. Manifestations of the Modern in Architecture and the City*, London: Routledge.
- González, H. (2006) *Escritos en Carbonilla: Figuraciones, Destinos, Retratos*, Buenos Aires: Colihue
- Goodman, N. (1985) 'How Buildings Mean', *Critical Inquiry*, vol.11, issue 4, p.642
- Hvattum, M. and Hermansen, C. (eds), *Tracing Modernity: Manifestations of the Modern in Architecture and the City*, London: Routledge
- Grementieri, F. (1995) 'El Academicismo Argentino (1920-1950): Integrador de Tradición y Modernidad', *Anales de Historia del Arte*, vol. 5, pp. 155-177
- Hvattum, M. and Hermansen, C. (2003) 'Introduction', in Hvattum, M. and Hermansen, C. (eds), *Tracing Modernity. Manifestations of the Modern in Architecture and the City*, London: Routledge
- Lynch, K. (1960) *The Image of the City*, Cambridge MA: MIT Press
- Proyecto CCB (2007) *Palacio de Correos: Proyecto Centro Cultural del Bicentenario*, Buenos Aires: Ronor
- Rossi, A. (1982) *The Architecture of the City*, Cambridge MA: MIT Press
- Shavelzon, D. (1987) 'La Casa de Correos de Buenos Aires (1873-1876)', *Revista DANA*, vol. 23, pp. 45-50
- Schavelzon, D. (2008) *Mejor Olvidar: La conservación del Patrimonio Cultural Argentino*, Buenos Aires: De los Cuatro Vientos Editorial
- Steward, P. J. and Strathern, A. (eds) (2003) *Landscape, Memory and History: Anthropological Perspectives*, London: Pluto
- White, J. (1980) *Rothschild Buildings: Life in an East-End Tenement Block 1887-1920*, London: Routledge and Kegan Paul
- Yalouri, E. (2001) *The Acropolis: Global Fame, Local Claim*, Oxford: Berg
- Yúdice, G. (2003) *The Expediency of Culture: Uses of Culture in the Global Era*, Durham: Duke University Press
- Zukin, S. (1995) *The Cultures of Cities*, Oxford: Blackwell

Electronic sources

- B4FS Arquitectos (2007) *Palacio de Correos. Proyecto Centro Cultural del Bicentenario*. <http://www.proyectoccb.com.ar/> [Accessed 15th March 2009]
- Castro, A. (2007) *Diario La Nación*: "Una de cada cuatro plazas está enrejada". http://www.lanacion.com.ar/nota.asp?nota_id=902694 [Accessed 15th March 2009]
- Comisión Nacional de Museos y Monumentos y Lugares Históricos. 2009. *Procedimientos: Pautas de Valoración*. <http://www.monumentosysitios.gov.ar/> [Accessed 15th March 2009]
- Correo Argentino. (2009) *Historia del Correo Oficial de la Republica Argentina*. <http://www.correoargentino.com.ar> [Accessed 15th March 2009]
- La Primera Buenos Aires. (2009) *La Primera Buenos Aires*, <http://www.primerabuenosaires.com.ar/> [Accessed 20th April 2009]
- Mapa de la Ciudad Autónoma de Buenos Aires. *Buenos Aires, Mapa Interactivo*. <http://mapa.buenosaires.gov.ar> [Accessed 23rd January 2010]

Endnotes

- ¹ A comprehensive analysis of the building, including its construction, significance, and uses, is included in my doctoral research at the LSE which analyses the interface between cultural development, space and memory in the context of the national Bicentenary commemorations. The transformation of the postal building constitutes the case study of my research project and an example of a culture-led urban regeneration project in Buenos Aires.
- ² Centro Cultural de la Memoria Haroldo Conti. <http://www.derhuman.jus.gov.ar/conti>
- ³ Correo Argentino, "Historia del Correo Oficial de la Republica Argentina". <http://www.correoargentino.com.ar>
- ⁴ Historical information on the postal service included in this section is mostly based on Bose, W. B.L. and Saenz, J.C. (1994) *Correo Argentino. Una Historia con Futuro*. Buenos Aires: Manrique Zago ediciones; and Correo Argentino, "Historia del Correo Oficial de la Republica Argentina", op.cit.
- ⁵ It is contentious, however, whether this was a foundation strictly speaking or only a precarious and provisional settlement, destroyed by local indigenous populations or by the Spanish themselves. For more information, see the archaeological project "Primera Buenos Aires". <http://www.primerabuenosaires.com.ar>
- ⁶ The Viceroyalty of the *Río de la Plata* was established in 1776 by the Spanish crown to govern the vast territories of what are today Argentina, Bolivia, Uruguay and Paraguay.
- ⁷ Correo Argentino, op. cit.
- ⁸ A detailed historical reconstruction of this building is offered by Daniel Shavelzon (1987) in *La Casa de Correos de Buenos Aires (1873-1876)*. *Revista DANA* vol. 23, pps. 45-50.
- ⁹ The nature of these lands is seen as the main cause for the difficult intervention of the building today, as there is water underneath.

¹⁰ Architect Norbert Maillard was one of the representative figures of the French academicism that is exemplified in Argentina's official architecture: not only with his construction of the Correo Central in 1888, but also with the Courts of Justice in 1904, and Buenos Aires National School in 1906. French academicism encompassed a range of different architectural styles, among which was *L'Ecole Nationale Supérieure des Beaux Arts*. *Beaux Arts* in Argentina took some elements of an eclectic classicism with some Art Nouveau aspects. For a more detailed explanation of these variations see Grementieri (1995).

¹¹ *Generación del 80* is also infamous for its slaughter of the indigenous population in what was called the "desert conquest", the State's cleansing operation founded on the myth of the emptiness of the lands that were actually inhabited by indigenous groups

¹² Cows and grains refer here to the country's agro-export model (1880-1930) based on agricultural production and cattle farming.

¹³ This idea of federalism is better understood when contextualised in the history of Argentina from 1820 to 1852, when *unitarios* and *federales* bloodily opposed different political projects for the country. While the former stood for a centralised government with its head in the rich port city of Buenos Aires, the latter supported decentralisation and province autonomy.

¹⁴ A post office union leader is said to have been brought face to face with the authorities in an argument on postal rates for Las Islas Malvinas (Falkland Islands). While most Argentines profoundly know that Malvinas are Argentinean, postal service to the islands was, however, charged as international delivery. After a vivid argument with the post office's authorities, postal rates were changed and Las Malvinas now benefit from having deliveries which are charged as "national". (Personal interview with a post office employee, February 2009).

¹⁵ He devoted all his life to Correo Central; first worked as an errand boy, had several promotions, and finally was manager in the night shift where he was responsible for the delivery of all correspondence in Buenos Aires. Upon retirement, he received a commemorative medal, plaque and diploma in gratitude for his dedication. My grandfather was very proud of his job and grateful to the post which ensured his family's welfare until his death.

¹⁶ Horacio Gonzalez (2004) "El alma de los edificios" in Gonzalez, H. 2006. *Escritos en Carbonilla: Figuraciones, Destinos, Retratos*. Buenos Aires: Colihue.

¹⁷ As indicated by the Historical Sites, Monuments and Museums National Commission website. <http://www.monumentosysitios.gov.ar/>

¹⁸ Staff at the Postal and Telecommunications Museum stated that according to their memory and archives, no restoration has ever taken place in Correo Central (Interview, January 2009).

¹⁹ The Grupo Macri is a holding created by Franco Macri and his son and current Mayor of Buenos Aires, Mauricio Macri. Among its businesses is Correo Argentino, the company which took over the post office.

²⁰ This has been stated repeatedly by several functionaries, from those in the Ministry of Economy and the Ministry of Federal Planning, Public Investment and Services to the Architects' Central Society and the President.

²¹ 'Una de cada cuatro plaza está enrejada' (2007, April 23) *Diario La Nación*.

5. The Canal in the City of Gardens

Nida Rehman

The thick rows of mature willow and stately eucalyptus lining the Lahore Canal shade its banks from the harsh summer sun and keep out the noise, dust, and chaos of the growing metropolis around it. The lush and verdant streetscape along the canal epitomizes the view most Lahoris, like myself, have of their city: we affectionately call it “the city of gardens and fountains”. Water and trees aside, however, this popular epithet is a reference to Lahore’s history of Mughal and Sultanate period gardens and not to the landscape cultivated along this nineteenth-century irrigation artery.

In this chapter I discuss the transformations in Lahore’s urban form concurrent with the development of the canal irrigation system in the Punjab under British colonial rule. By examining these developments simultaneously, previously unstudied relationships emerge. First, I demonstrate that the growth of the modern city – its form and character – was historically shaped by the location and utility of the Lahore branch of the Bari Doab Canal. Then, I advance a view that the colonial narrative of physical and social reform resonates in Lahore’s enduring urban identity: the city of gardens.



Figure 1. The Lahore Canal. (Rehman Tahir 2010)

My methodology combines two parallel modes. Analysis of urban form shows the physical relationship between the modern city and the canal and the development over time of an extensive urban landscape of public and private gardens. Together with a distillation of colonial administrative writings relating to these developments, I shed light on the prominent ideas that shaped irrigation and urban reform in the late nineteenth century. Continuing in the latter mode, I also examine Pakistani authorship about the city to illuminate continuities between the ideas that shaped colonial reform and those that frame a pervasive image of the city today.

Using the lens of colonial discourse to 'read' the form of the modern city, I trace these continuities of meaning through textual and visual analysis. With the canal as a literal and figurative conduit in this analysis, I aim to highlight how landscape becomes a tool of political will. Just as the colonial administration relied upon notions of decay and cultivation of nature to harness historical legitimacy for physical and social transformation in the nineteenth century, the city-of-gardens moniker repackages these notions to grant similar civil sanction to urban reformers today. In Lahore, the term *garden* and the spatial forms associated with it thus evoke an historical tension. On the one hand, the practices of landscape beautification draw from the discourse of rationalised and sanitary planning in the colonial period, while on the other hand the concept of garden helps to link the aspirations of a westernised middle class to the cultural traditions of Mughal gardens. The claim to cultural authenticity legitimates landscape practice as a device of contemporary urban reform steeped in technocratic notions of modern progress.

The country: cultivation and decay in the narratives of colonial irrigation reform

The mid-nineteenth century heralded the unprecedented development of large integrated technological systems in the western and colonised world. These systems gave rise to vast changes in all aspects of human life: the transformation of urban and rural settlement patterns, increased movement of goods and

people, the reduction of disease and the growth of economies. As in the rest of the world, the Punjab witnessed considerable physical, social and demographic change in the second half of the nineteenth century. At the heart of these changes was the colonial development of the networks of railways, roads and canals. As early as the 1817, the British began to develop what eventually became a gargantuan system of perennial irrigation canals in the alluvial plains of Northern India. Prior to 1836, most of the work consisted of the rehabilitation of existing canals primarily built under Mughal rule. Afterwards an entirely new system of canals was conceived, engineered and layered upon this older network beginning with the Ganges Canal in the Ganges-Jumna Doab in Uttar Pradesh. Work on the first canal project in the Punjab, the Bari Doab Canal began shortly after the formal annexation in 1849. Historically this landscape - the site of the ancient Indus Valley Civilization - had been irrigated by the annual inundation of the River Indus and its branches. In contrast, the modern irrigation system came to form an intricate, machine-like network interlacing the Doabs or interfluvial areas and transforming the landscape from what was considered a barren wasteland into a productive and fertile "garden".

In *Machines as the Measure of Men*, Michael Adas (1989) examines how science and technology became the "foundations" of a conceptual framework for colonial reform in the nineteenth century. The ill-defined but wide-ranging (and characteristically bourgeois) ideology of the civilising mission 'lent a "humanitarian mystique" to the nasty business of conquest and domination' (1989, p. 200). The building of the colonial irrigation system in India straddled this nebulous zone between moral obligation and forced occupation: the canals were a tool for both liberation and exploitation. Whilst expanded water distribution and increased cultivatable land potentially held economic benefits for the local people, those benefits were dwarfed by the advantages to the state in the form of increased revenue through commercial agricultural production, the sale of new land, the collection of water rates and higher taxable incomes.

Furthermore, the application of scientific methods, though desired by colonial engineers, often contradicted the localised

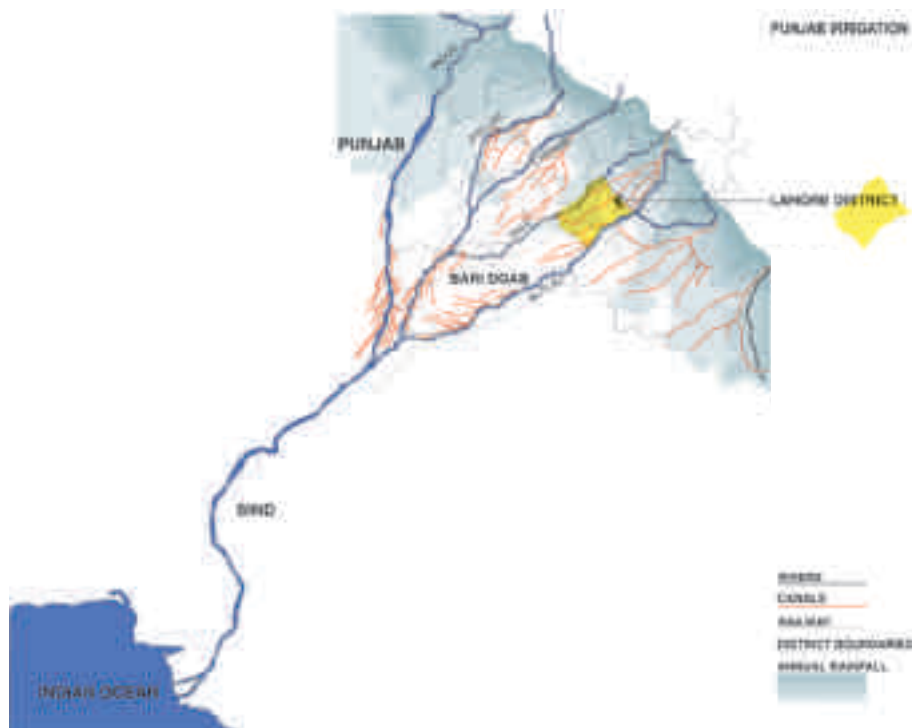


Figure 2. Irrigation map. (Rehman 2009)

administrative and political requirements for effective rule. The universalising and presumably equitable agendas of 'imperial science' were trumped by what David Gilmartin (1994) has called the imperatives of 'scientific empire', the hierarchies of local (and feudal) alliances and the systems of classification and enumeration by which people were tied to the state through the social construction and physical settlement of people on agricultural land.

Thus, the abstract aims of improvement that were predicated on the advancement of technological systems were also subject to the political dictates of effective rule. Far from being devoid of social content, the colonial narratives of technological progress reveal complex social agendas. The technological and planning interventions in nineteenth century Punjab were framed by narratives linking the natural landscape and the local people in a collective project of reform.

This imaginary inhabits political, bureaucratic and literary writings of the time period. Official gazetteers, settlement reports and municipal reports, contained a recurring emphasis on the notion of reform through cultivation to increase the productivity of the human and natural resources. Many of these writings, particularly the land settlement reports published by the provincial government between 1860 and 1927, generally began with descriptions of the physical and demographical

characteristics of the area, seamlessly combining empirical observations with value based judgments to describe a landscape ultimately lacking in desirable characteristics such as fertility, productivity and beauty. Whilst the terrain was described as arid and infertile, 'poorly cultivated and thinly inhabited' (Davis et al. 1860, p. 3) or 'sadly wanting in fertility' (Saunders 1873, p. 3), its inhabitants were evoked as criminal or lazy: these traits purportedly reinforced by their lifestyle of pastoral nomadism. While the aridity of the land could be corrected by the irrigation system, the social attributes were to be reformed by an almost biblically ordained, settled agrarian lifestyle.¹

In the first settlement report of the Lahore District in 1860, the settlement officers noted that the landscape had not always been infertile and inhospitable to human settlement. Citing 'native tradition' and archaeological evidence they speculated that the land had indeed been fertile in the past but had diminished in its productivity when it was deserted and ruined in the aftermath of tumultuous incursions over many years.² The evocation of ruin allowed them to speculate freely on a more abundant and fertile primordial condition. By shifting agency from nature to past human interventions, the colonisers implicitly claimed powerful historic and cultural legitimacy to resurrect the primeval fertility of the landscape, and the canal system became a tool to realise that historic mandate.

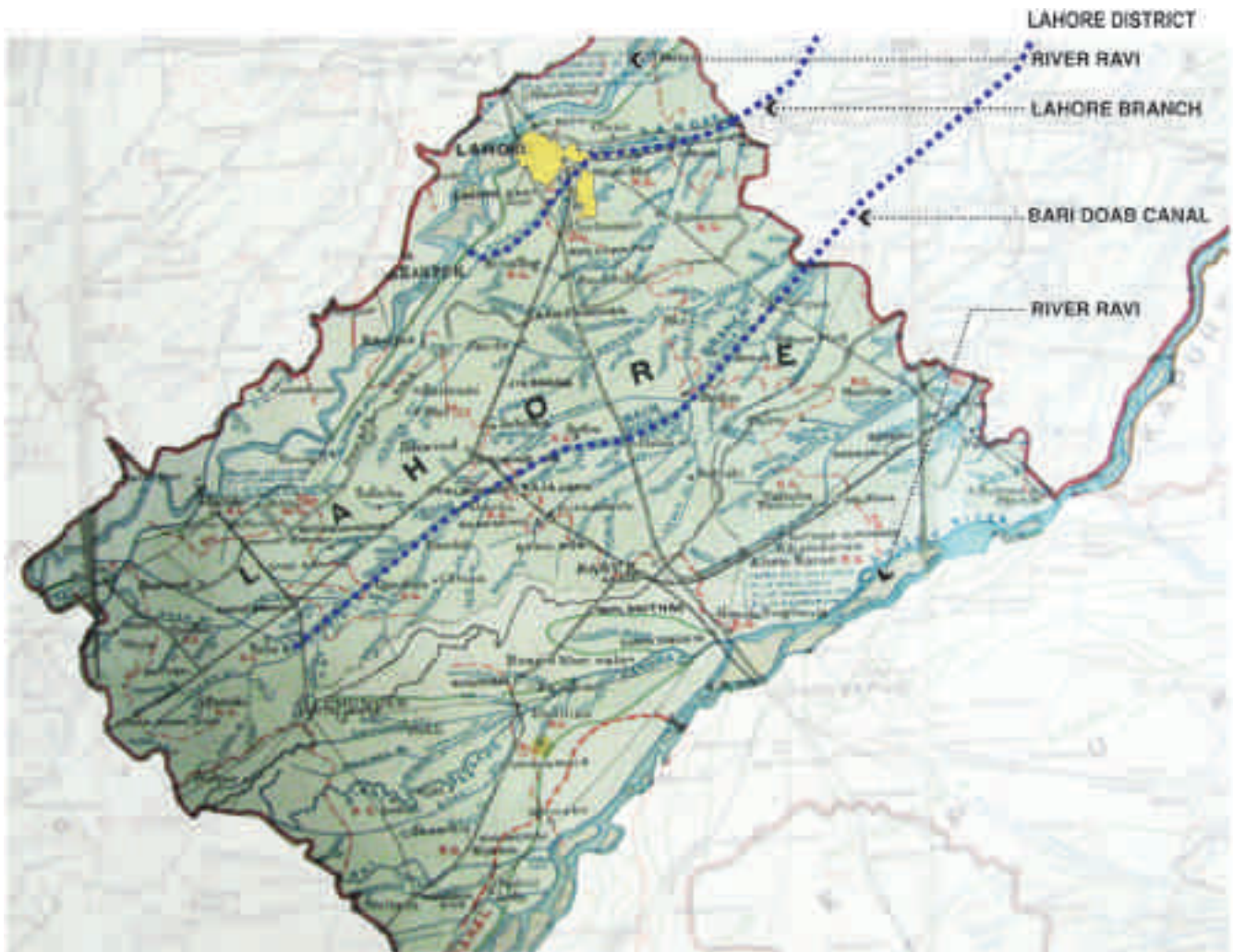


Figure 3. Lahore District. (Detail from: Irrigation Dept. Punjab, General Map). (Courtesy of Punjab Civil Secretariat Archives/Library)

After the construction of the Bari Doab Canal in 1869, Leslie Saunders (1873), the settlement officer who previously wrote of the inadequacy of the landscape, subsequently reported with an enthusiastic anticipation of imminent change:

Hitherto these uplands have been looked on as the poorest tracts in the district, as being sparsely populated, and without the means of obtaining even good drinking water for man or beast; but now that the Bari Doab Canal has been cut down the center of this tract there is every reason to hope that this great fertiliser will turn this desert into a garden. (1973, p. 3)

In predicting this transition, Saunders saw the canal as a means of ensuring the commercial benefits of increased cultivation

(this great fertiliser) and the aesthetic reconstitution of the countryside: from arid desert to abundant garden. The production of this landscape in colonial rhetoric relied on ambiguous but powerful conceptions of nature. While the canals signified an improvement upon nature they simultaneously allowed a return to nature; an original, more fertile condition of the land that had presumably existed prior to its ruin. This rhetorical use of decay and the inferred colonial imperative to resurrect was a device that also emerged in colonial writings about the urban landscape of Lahore. In the following section I examine the growth of the city vis-à-vis these ideas and posit the Lahore canal as an instrumental force in the emerging form of the city.



Figure 4. Map of Lahore from 1837. (Courtesy of Punjab Civil Secretariat Archives/Library)

The city: transforming an urban landscape

In the 1850's, as expanded irrigation transformed the countryside, the city of Lahore was also being transformed. Its new rulers embarked on a program of reconfiguring and expanding the provincial capital to accommodate new residential areas, government functions, institutional buildings and recreational facilities. Like the countryside, the colonial administrators described the existing city as a site of decay and ruin. Colonial writings evoke Lahore's past through historic travellers accounts, local tradition and archaeological evidence to create an image of a place unsuited to modern life and to British (or civilised) sensibilities. The city, once praised by Bernier and Milton, had diminished in size, population as well as 'magnificence' from its heyday in the Mughal period (Walker 1894, p. 271). Of its original thirty-six quarters, only the nine quarters within the old walls survived, in addition to the jetsam of urban desertion outside them.

Two dominant tropes illuminate colonial thinking about the city. To the rationalising gaze of the colonial administrators, the ancient walled city was impenetrable and disorderly. At the same time, the deserted landscape outside the city walls was considered as a place of decay and ruin. These two areas, the walled city and its outskirts figured very differently in the colonial imagination and elicited different planning responses. While

the city's medieval urban fabric was largely ignored in planning efforts, the 'wasteland' in its environs (like the rural countryside) was poised on the brink of a major transformation under the 'civilising mission' of the colonial rulers.

In *Making Lahore Modern*, William Glover (2008) discusses the predominant colonial perception that the old city was opaque and impenetrable. By opacity, he refers to the lack of order and rationality that rendered the city illegible to efforts at spatial and functional ordering. The dense urban fabric, with its tightly packed houses, street crowds, dust, noise and sanitation deficiencies, troubled the colonial officials tasked with rational analysis. Glover also suggests that the social structure of the city was 'resistant to aggregate description' (2008, p. 3). Here he means that the complex familial arrangements, and the traditional social structure eluded the tools for census data collection and enumeration.

Unlike the view of the old city as spatially opaque, the deserted environs of the walled city presented a different kind of challenge to the government. In the words of John Lawrence, the chief commissioner of the Punjab:

Few suburban localities could be found in any province presenting such peculiar sanitary difficulties as the vicinity of Lahore. The station of Anarkali, with its adjuncts, is scattered over an area of several square miles, over which



Figure 5. Map of Lahore from 1864. (Courtesy of the collection of F.S. & Shahnaz Aijazuddin)

extend the ruins of not one but several successive cities of various eras and various dynasties. The surface of this extraordinary plain is diversified by mounds, kilns, bricks, stones, broken masses of masonry, decaying structures, hollows, excavations, and all the debris of habitations that have passed away. The soil is sterile, and impregnated with saltpetre, but the ground is interspersed with rank vegetation, and though generally arid, yet from its undulating nature, possesses an unfortunate aptitude for the accumulation of stagnant water. (1852, p. 251)

Echoing the descriptions of Punjab's arid, unproductive and decaying rural countryside, here the metaphor of decay was used to describe a palimpsest revealing traces of past settlement, overrun by natural processes. The "successive cities" layered upon each other cropped up as figures in an unsanitary field where hard arid earth gave way to swampy pockets of uncultivated, wild plant growth. The planning gaze, however, was affixed on this landscape, an imagined tabula rasa on which the government envisioned a series of improvements: a new city with a civil station, cantonment and residential suburbs; modern functions and bureaucracy; and a different group of inhabitants including British officers and a newly cultivated Indian middle class. Within only a few decades of annexation this modern city was built in the "ruined" vicinity of the ancient city.

The dreary expanse of crumbling ruins and tottering walls and old mounds, the desolate and barren tracts, strewn for miles around with debris, where there stood not a tree

to give shelter to a weary travellers', have through the magic wand of British civilization, been charmed into a scene of life again. (Latif 1994 [1892], p. xi)

During this time, with construction beginning in 1859, a branch of the Bari Doab Canal was extended 'to spread fertility toward and about the city of Lahore' (Paustian 1930, p. 28). The canal entered the Lahore district near Wagah, north east of the city. Following the geographic logic of gravity-fed irrigation, the canal was situated along the natural ridge passing between the walled city in the north and the village of Mian Mir in the south. It was cut along a course parallel to the river and was discharged into the river Ravi through a channel near the village of Niaz Beg, about seven miles southwest of the city. Two railway lines, extending to Amritsar in the east and Multan in the south, crossed over the canal near Mian Mir. Like the other canals in the system, the Lahore branch was built with a fairly standardised cross-sectional layout with ample tree-lined banks constructed with roadways for vehicular transportation.

The outskirts of the walled city, an area once characterised as a decaying wasteland, became the site of the new colonial city where a landscape of gardens and fields was carefully cultivated:

The environs of the city in 1849 were a 'dreary expanse of crumbling ruins', remains of the ancient city of the Mughals. The houses and offices of the first residents



Figure 6. Governor House, Lahore from 1869. (Courtesy of the collection of F.S. & Shahnaz Aijazuddin)



Figure 7. Lawrence Gardens, Lahore. (Rehman 2009)

were confined to the neighbourhood of the old cantonments, which occupied a strip of alluvial soil to the south of the city, and running parallel with an old bed of the Ravi. Gradually, however as the European population increased in numbers, the station spread eastward, making steady inroads upon the less inviting region which lay further from the river. And thus year by year the ruins and graveyards of Lahore passed under the humanising influence of western civilisation. Metalled roads have pierced the debris of former days, and the bungalows and gardens have succeeded to ruins and rough jungle. Much still remains to be done, but the scene has already assumed a garb of life and trimness not discreditable to the Punjab Capital. (Walker 1894, p. 284)

These new developments to the south and east of the old city were programmatically diverse: the civil station contained institutional, residential, industrial, and bureaucratic buildings and the new cantonment housed military functions. Additionally there was an extensive open space and garden program that typologically linked these new projects. Eight distributaries and various watercourses branching from the Lahore canal irrigated many of these new colonial gardens. This modern city, with its resplendent and peaceful estates, broad tree-lined avenues and spacious bungalows was the morphological counterpoint to the old city with its disorderly winding streets and the chaotic amalgam of humanity, noise and garbage. At the same time the open space provided a physical separation and sanitary buffer from old Lahore. Lahore thus became two distinct cities. Despite the distinction between these two very different cities, the colonial city was not a segregated or heterogeneous environment. Instead it purposefully integrated certain classes of Indian society within the culture of new Lahore.

One of the first notable developments in the new suburban landscape was the building of the new cantonment. After annexation, the British army moved into the barracks that had previously housed the troops of Ranjit Singh's army in the area of Anarkali near the old city. In 1851 sanitation concerns prompted the search for a more apt environment for the troops. When the Lahore branch of the Bari Doab Canal was built a few years later, the Mian Mir Cantonment was the only urban locality on the far side of the canal. A cut from the canal was extended into the cantonment to supply water to the parks and tree-lined avenues of the Cantonment:

They stand on an open and exceedingly dreary plain, originally bare of trees, but now gradually growing greener as canal irrigation extends and the trees planted by the roadside and assiduously fostered spring up. (Walker 1894, p. 309)

While it continues to house the military headquarters of the district corps, the cantonment is today the city's most exclusive residential area, replete with spacious bungalows, gardens and wide landscaped avenues. Although the Cantonment was

distinct from Lahore's civilian suburbs, the transformation of the landscape and the careful cultivation of natural elements was a common feature to both.

The civil station located between the cantonment and the old city, with the splendid Mall linking the two, housed offices of the government, residential areas for the civilian officers and recreational spaces. Perhaps the one project most emblematic of the garden city that emerged along the banks of Lahore's new canal was the Lawrence Gardens in the civil station.

The gardens, developed in the 1860's with the combined financial patronage of English as well as Indian elite, included a park, the home of the Punjab Agri-horticultural society and the botanic gardens, the zoo, cricket pitches and tennis courts. Botanical research, seed acclimatisation and plant propagation were conducted at the Agri-Horticultural Society Gardens and the gardens were used to display different perennial and seasonal species of native and imported plants. Amaryllis, camellias, orchids and chrysanthemums were just a few of the varieties blooming in turn throughout the year. Malta Orange trees, Italian Pomelos, mango and fig were among the eighty thousand trees of six hundred different species planted at the Lawrence Gardens. The plants and seeds developed at the botanical gardens were supplied without cost to various public institutions and individuals in the city.

William Glover (2008) suggests that rather than 'an isolated "island of Englishness"', Lawrence gardens was a complex social condenser configuring a controlled interaction of colonial and local elite. With its neo-classical architecture, the picturesque landscapes, didactic displays of botanical research and the racially heterogeneous social functions and financial patronage, the Lawrence Gardens embodied Lord Maculay's famous pronouncement in 1835 to create a 'class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect'. Indeed the physical, social and financial collaboration between Lahore's Indian and colonial elite found a perfect setting within the Lawrence Gardens. In Glover's analysis the Lawrence gardens is a node in the city where this interaction was concentrated. I emphasise that this interaction was dispersed throughout the new suburbs of Lahore, manifest in the city's form and nurtured by the invisible infrastructure of the canal's urban distributaries.

The canal water was distributed to suburbs developed south of the civil station such as Gulberg, Model Town and Garden Town. The Model Town for example was developed in the 1920s and based on Ebenezer Howard's Garden City plan.

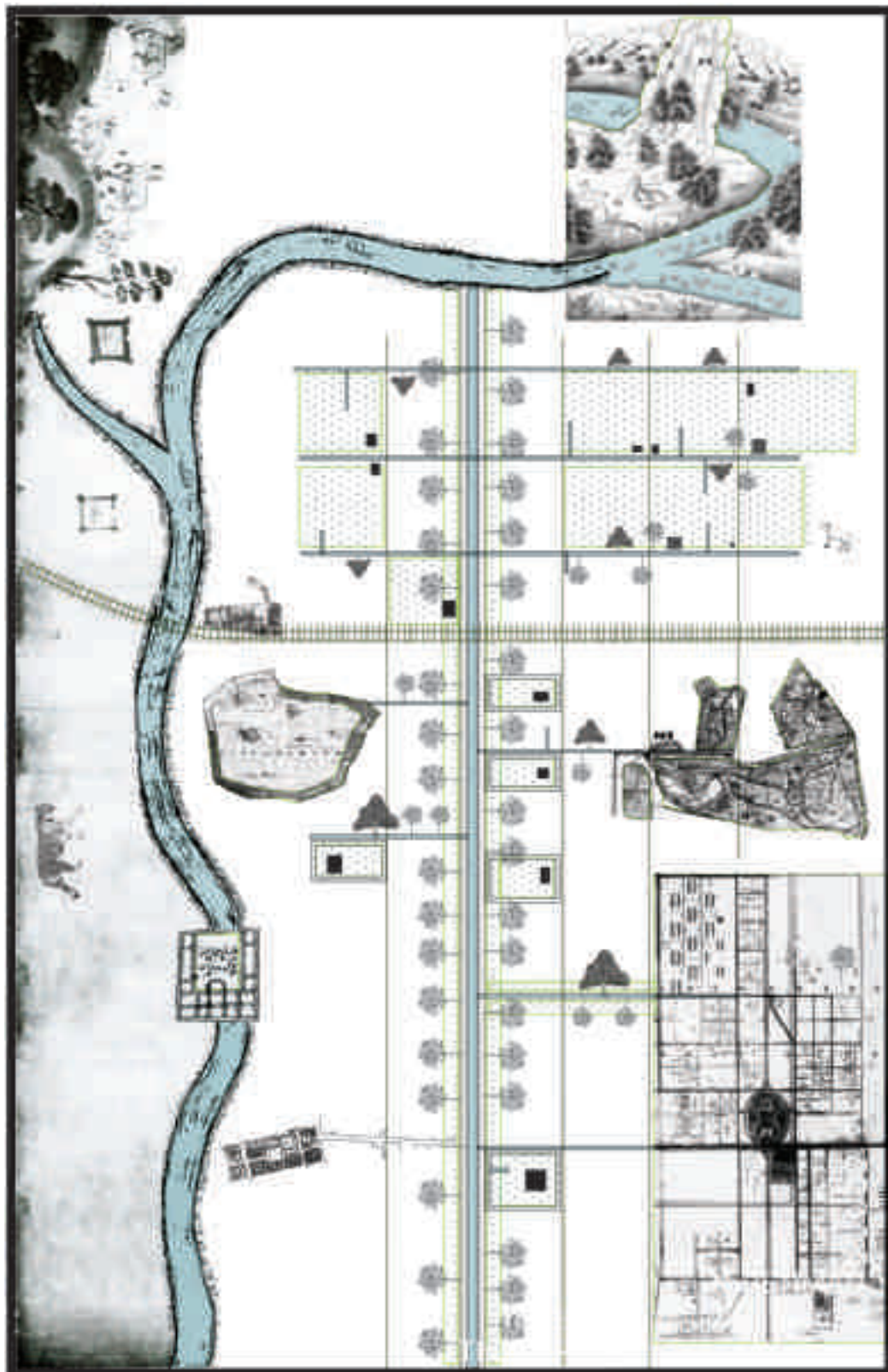


Figure 10. The Canal in the City of Gardens. (Overlay by Rehman 2009)

These new areas housed the more affluent Indians who emigrated from the walled city, leaving behind their old quarters for the arrival of rural migrants hoping to make their way in amongst the material prosperity of the city. As the old *havelis* vacated by the elite began to be sub-divided to accommodate the large numbers of newcomers and the walled city became more congested, the homes in the new suburbs were increasingly detached and spacious. The neat and ordered private gardens maintained around the houses were facilitated by the exchange of plants and seasonal flower displays at the Lawrence gardens. Thus, looking beyond the original Anglo-Indian collaboration, the Lawrence Gardens was not only a physical condenser of social interaction isolated from the rest of the city. Once ensured a precise and consistent water regime through the canal, a wider cultural association with gardens was and continues to propagate in the homes of Lahore's "suburban" elite today.

The form of the new city was inextricably tied to the supply of irrigation water. The layout of Lahore's pre-colonial urban form, comprising the walled city, the old suburb of Baghbanpura and the Shalimar Bagh complex, the tomb complex of Jahangir in Shahdara and a scattering of suburban estates along the southwest and northeast of the walls, indicated a strong orientation of the city toward the River Ravi, Lahore's primordial lifeline.

As demonstrated in the drawings in figures 8 and 9, the transformed landscape of the nineteenth century city - with the civil station, the cantonment and the new suburbs - reoriented the city away from the river. Over time, the waters of the Ravi receded and the new developments proceeded: the canal came to form a central artery in the city. As the canal waters, siphoned from the River Ravi nurtured the suburban landscape, the river and the medieval core were relegated to the periphery of the growing city. While the areas along the canal formed the most important central urban spine, the older parts in the northwest along the river were subject to continual degradation. Since the late 1800's, the river itself became the unfortunate beneficiary of the city's refuse and the "opaque" walled city was more or less left out of the planning regimen.

The urban forms of the divided city today - a congested ancient core and a spacious suburban landscape - reveal the dualistic colonial historical stance. Whereas the ruin and debris of the "dead city, the palimpsest, could be easily effaced for a new reading of Lahore's history, the lived portion within the "opaque" quarters, impenetrable to technological observation, remained formally and historically stagnant. The gardens of the suburban landscape, with the canal as an ordering mechanism, inverted the spatial opacity of old city, providing a sanctuary protected from the decay and disorder. The canal cultivated not just gardens but a

"modern" garden culture in Lahore. Although the primary role of the canal was the irrigation of the rural hinterland, the system was and remains an underappreciated yet pervasive infrastructural layer of the city. Its urban utility consisted solely of providing water to public and private gardens rather than supplementing water supply for any other purpose. This infrastructural aspect, while briefly noted by colonial chroniclers in their descriptions of the Lawrence Gardens is absent from more recent urban writing on Lahore. My own 'discovery' of this particular distributary's route was made during an interview with Alam Sahib, the head *Mali* (gardener), who has overseen and tended the Lawrence Gardens for over half a century. He waxed enthusiastic about the precision and order of the canal system and how the basic functioning of the gardens has continued to depend on this infrastructure of water-courses despite the water supply being augmented by tube-wells in recent years.

At the turn of the century, this new landscape of urban gardens facilitating a new social exchange between the elite ruling and subject classes started to take shape in the city and positioned itself within urban narratives. Muhammad Latif, a government official who wrote a comprehensive history of the city in 1893 expressed this sentiment when he wrote, 'Lahore was not ever a garden as it is now.' (1893, p. xii).

The city of gardens

My purpose in demonstrating the instrumentality of regional infrastructure to the nineteenth-century transformations of the decrepit and decaying parts of Lahore into a garden is to explore the conceptions that framed nineteenth-century reform. The narrative of a decaying and arid landscape was an important corollary to irrigation reform under colonial rule as it delivered an historical sanction for colonists to enact physical and social reform in the countryside and the city. In the following paragraphs, I explore the lineage of these notions within the city-of-gardens framework in contemporary urban narratives. I discuss the agency of this narrative as a historical device to shield the modern and technological planning apparatus in a façade of authenticity by linking the new suburban middle classes to the traditions of Mughal power.

However, my eagerness in ascribing agency to the canal for Lahore's urban form is, to my knowledge, a slightly renegade view. A few days prior to my excited discovery of the canal's urban watercourses, courtesy of Alam Sahib, I met with one of Lahore's most prominent public intellectuals who reaffirmed the more commonly held perception that the canal although transcribed within Lahore's urban form, contributed not utility but charm to the city. By reinstating agency to this regional artefact, vis-à-

vis the form of the city, I am suggesting that the politics of its conception and the role of the colonial suburban landscape need due acknowledgement in Lahore's contemporary identification with its historic gardens.

As mentioned earlier, this identification primarily refers to an older history of imperial garden patronage under Sultanate and Mughal rule in the Sub-continent. In *Gardens, Urbanisation, and Urbanism in Mughal Lahore: 1526-1657*, James Wescoat (1996) suggests that Mughal garden building in Lahore, commencing during the time of the first emperor Babar in 1526 until the second half of the seventeenth century, was a variegated 'field of experimentation rather than a consistent policy or convention' (1996, p. 142). Different relationships between city and garden, citadel and garden, and suburb and city emerged during this period, indicating a dynamic set of meanings and functional practices of garden building. There was a diversity of functions, typologies and scales associated with gardens. Despite the wide range however, gardens were rarely meant to serve public or urban functions: they were exclusively the domain of the royal and noble aristocracy.

Examining the city of gardens narrative in Pakistani literature about Lahore reveals a consistency with nineteenth-century colonial writings, with a dualistic emphasis on the degeneration and cultivation of landscape:

Lahore - the ancient whore, the handmaiden of dimly remembered Hindu Kings, the courtesan of Moghal emperors - bedecked and bejeweled, savaged by marauding hordes-healed by the caressing hands of successive lovers. (Bapsi Sidhwa 2005, p. xi)

Perhaps in reality the distinction between a whore and a courtesan is slight, but it is significant in affect. Here Bapsi Sidhwa, an eminent Pakistani novelist and one of Lahore's celebrated chroniclers suggests how the city is successively destroyed and healed, pointing to an historic process in which the city is formed through a cycle of destruction and renewal.

The colonial writings discussed earlier described in Lahore and its rural hinterland a landscape degenerated through cycles of ruin and the act of resurrecting a primordial fertility through infrastructural reform. The idea of improvement to re-create an abundant nature from the ravages of decay is a theme recast in contemporary narratives about the city. The theme of decay suggested a sense of loss while the theme of refinement implied a historically sanctioned rebirth. This historic imperative, I argue, is the operative imaginary at work in "the city of gardens" motif. The twinned visions of nature, the desert and the garden, are the opposite ends of the process of improvement.

Who are the successive hordes and lovers that Bapsi Sidhwa refers to?

For the colonial writers, the hordes refer to the century of wars and destruction at the waning of the Mughal Empire. For Muslim writers it is the Sikh period in Lahore's history that represents a time of degradation. In the post-colonial imagination the Mughal heritage is the glorious past—the Mughals are the quintessential "healing lovers" who created gardens out of a desert and so prominently revered in the city of gardens narrative. Harkening back to the Mughal city, as the epitome of refinement and culture and a centre of Muslim power, Saifur Rahman Dar's book *Historic Gardens of Lahore* positions this narrative:

Many European travellers, who visited Lahore during its heyday of Mughal empire are full of praise for its gardens and palaces. They have rightly called Lahore a city of gardens. (...) Lady Dufferin did not see Lahore at its best. The city, its palaces, parks and gardens had already suffered a lot at the hands of the Sikhs. What Lady Dufferin saw was a ghost of Lahore of Akbar, Jahangir and Shahjehan's days. (Dar 1998, p. xi)

The parallel imaginations of loss and renewal, associated with Lahore's gardens, are oft-narrated themes. Numerous writers have eulogised the loss of the city's 'green splendour, which is no more,' (Chaudry 1998, p. 276), while others have been 'steeped in its romance' (Sidhwa 2005, p. xi). In literature about Lahore, the beauty of the cultured city derives from its trees, gardens, flowers and fountains, whilst its decay from unruly development practices, the deficiencies of sanitation infrastructure and unhygienic social practices, environmental pollution caused by increasing traffic and congestion, and a general neglect of historic monuments. At the end of his book Saifur Rahman Dar writes:

It is unfortunate that the people of this most cultured city did the most uncultured thing in destroying all these historic gardens. [...] The city of Lahore now gives a very gloomy look. The ever extending limits of the city are swallowing the greenery which once encircled the city. The rapid means of communications are polluting the air [and unless] Lahore can be made the Lahore which it once was [...] it will never be able to regain its place in history as a neat and clean city with gardens, orchards and parks. (Dar 1982, p. 48)

This lament manifests a tension. Dar conflates the desire to uphold or preserve tradition (the gardens of Lahore) with a modernist call for cleanliness. His grievance over the loss of the city's gardens echoes the legacy of colonial writers who spoke of a desire to cleanse an environment characterised by its impenetrable disorder and dirtiness and a presumed inherent complacency of the people to address these concerns.

In 1884, a public servant, Lala Kashi Ram, wrote a manual on sanitation in the Punjab deploring the lack of citizen awareness and concern for matters of civic hygiene. He noted that 'a majority of the ignorant mass of our countrymen do not possess a sufficient knowledge of the laws of sanitation' (1884, p. 3).

This conflation of ideas about traditional gardens and modern sanitation is also evident in planning rhetoric today. Shahbaz Sharif, Punjab's Chief Minister, has tasked Lahore's planning agencies with an ambitious Rs.480 million Rupee project to resurrect the city's verdant glory of its Mughal heyday. The new "City of Gardens", would be developed with the sponsorship of private entities and the assistance of "foreign consultants". The identity, easily co-opted by the discourse of globalised capitalism³ also continues to be pervaded by the language of sanitation. This language, used today by the state, planners and conservationists alike, indicates a lineage of rationalist thinking about the city where garbage, dirt and disorder are seen as backward and un-modern elements in the city. This was as prevalent in the colonial administrative descriptions of the decaying city as it is in the framing of Shahbaz Sharif's beautification project. In his call for 'a vigorous campaign [to create] awareness among the people about cleanliness of their localities and surroundings',⁴ Sharif is repeating Lala Kashi Ram's lament in 1884 about the ignorance and ineffectiveness of Indians in matters of sanitation. His 'is the language, not only of imperialist officials but of modernist nationalists as well' (Chakrabarty 2002, p. 66).

Today, with a population of nearly ten million people, the city's expansion has occurred in a haphazard fashion primarily constituting the building of (suburban) residential settlements (often termed in the development vernacular as housing schemes or colonies) over agricultural land, mainly in the southern periphery. The urban tissue comprises a patchwork of quasi-planned low-density, middle to high-income areas whose interstices are packed with high-density, low-income settlements. Often, slum conditions are created by a lack of infrastructure and services to rural villages that have been consumed into the urban territorial spread. In a city whose major water supply is deemed contaminated and unfit for untreated consumption and a crumbling infrastructure, which rarely provides adequately for a majority of the populace, the notion of a genteel urban culture of gardens and fountains seems ironic and anachronistic.

While the necessity for adequate sanitation and the improvement of public space are real needs of this burgeoning mega-city (and Sharif's proposal has the potential to address these needs), the rhetoric of "cleanliness" and "beautification" resonates with the colonial anxieties about the disorder and decay of urban form. At the same time the desire to recreate a glorious past diffuses a technocratic enterprise of creating a rationalised and open

structure of the city through landscape and infrastructure, in an evocative identification with Mughal cultural traditions.

As cultural anthropologist Clifford Geertz (1973) notes, there are two conflicting tendencies that characterise nation-building discourses in the post-colonial era. He calls these 'essentialist' and 'epochalist' forces. These are prevalent within the built domain of the post-colonial world. While the former reflect in the tendency of planners to develop form with roots in tradition, the latter help envision the future through ideas of modern progress. Infrastructure building has remained invested in the epochalist project with the belief that standardised technological systems are a means to achieve progress and economic growth. However, in the developing world, architects and planners have tried to temper such determinism by recalling tradition in built form. In Lahore, gardens - both in form and concept - allow such associations between infrastructural development, architecture and history through the planning of urban landscape beautification.

Conclusion

Over time many of the distributaries and watercourses of the Lahore canal have diminished in function. The role of the canal in the conception and organisation of the modern city has similarly receded in historical memory. Stripped of its urban function -physical and historical - the canal remains an accidental artefact of the regional irrigation system, innocuously bypassing Lahore to feed its rural hinterland, but retaining nonetheless an image of the city's romanticised relationship with gardens.

By associating *garden* exclusively to the more revered history of Mughal gardens, the city-of-gardens narrative obfuscates the technocratic and reform oriented planning history of the modern city, the social collaborations and interactions that facilitated colonial rule and, more importantly, the intractable division of the city into two halves. One half characterised by disorder, increasingly higher densities and the presence of a forgotten and polluted river, while the other by its spaciousness, beauty and the cultivation of gardens by a rationally ordered waterway.

In this essay, I conceptually relate the narratives of colonial reform and that of the city of gardens in a sort of lineage. These two are admittedly very distinct cultural fragments but in doing so I hope to entice a discussion of what gardens mean and produce in the city and how future directions for landscape could benefit from an interrogation of Lahore's urban legacy of the nineteenth century suburban garden landscape.

References

- Adas, M. (1989) *Machines as the Measure of Men, Science Technology, and Ideologies of Western Dominance*, Ithaca: Cornell University Press
- Ali, I. (1989) *The Punjab under Imperialism 1885-1947*, New Dehli: Oxford University Press
- Chakrabarty, D. (2002) *Habitations of Modernity Essays in the Wake of Subaltern Studies*, Chicago: University of Chicago Press
- Chaudhry, N. A. (1998) *Lahore: Glimpses of a Glorious Heritage*, Lahore: Sang-e-Meel Publishers
- Dar, S. R. (1982) *Historical Gardens of Lahore*, Lahore: Aziz Publishers
- Davies, R. H., Egerton R. E., Temple, R., and Morris, J. H. (1860) *Report on the Revised Settlement of the Lahore District in the Lahore Division*, Lahore
- Geertz, C. (1973) *The Interpretation of Cultures: Selected Essays*, New York: Basic Books
- Gilmartin, D. (1994), 'Scientific Empire and Imperial Science: Colonialism and Irrigation Technology in the Indus Basin', *Journal of Asian Studies*, vol. 53, no. 4, pp. 1127-1149
- Glover, W. J. (2008) *Making Lahore Modern: Constructing and Imagining a Colonial City*, Minneapolis: University of Minnesota Press
- Latif, S. M. (1994 c1892) *Lahore: Its History, Architectural Remains and Antiquities*, Lahore: Sang-e-Meel
- Paustian, P. W. (1930) *Canal Irrigation in the Punjab: An Economic Inquiry Relating to Certain Aspects of the Development of Canal Irrigation by the British in the Punjab*, New York: Columbia University Press
- Ram, L. K. (1884) *Notes and Suggestions on Sanitation in the Punjab*, Calcutta
- Saunders, L. S. (1873) *Report on the Revised Land Revenue Settlement of the Lahore District in the Lahore Division of the Panjab, 1865-69*, Lahore: Central Jail Press
- Sidhwa, B. (ed.) (2005) *City of Sin and Splendour: Writings on Lahore*, New Delhi: Penguin Books
- Walker, G.C. (1894) *Gazetteer of the Lahore District*, Lahore: Lahore Civil and Military Gazette Press.
- Wescoat, J. L. (1996) 'Gardens, Urbanization, and Urbanism in Mughal Lahore: 1526-1657', in J. L. Wescoat and J. Wolschke-Bulmahn (eds) *Mughal Gardens: Sources, Places, Representations, and Prospects*, Washington DC: Dumbarton Oaks Research Library and Collection, pp. 139-170
- Imagining a Colonial City, Minneapolis: University of Minnesota Press.

² Without the mention of specific dates, the authors point to the period of the decline of Mughal Rule, 'during some of the Muhammadan conquests most probably those of Nadir Shah, or Ahmed Shah Durrani' (Davies et al. (1860, p.16).

³ *The News International*, "Lahore to be again made 'city of gardens': Shahbaz"

⁴ Ibid.

Endnotes

¹ For a discussion of the social structure and re-settlement of people in the Canal Colonies see, Imran Ali (1989) *The Punjab under Imperialism 1885-1947*, New Dehli: Oxford University Press. An elaboration of the criminal tribes settlements can be found in, Glover W. J. (2008) *Making Lahore Modern: Constructing and*

6. The Mughal Pavilion

Ninad Pandit and Laura Lee Schmidt

In the summer of 2006, a structure of no particular archaeological significance was discovered in the process of clearing the overgrown shrubbery in the historic neighbourhood of Nizamuddin in Delhi. This artefact, presumably a tomb, was marked by a complete ruination of its structure. The cloister vault¹ covering its square base had caved in, the stone latticework patterns were lost, and no markers of the commemorated life remained visible. Engulfed by dense vegetation, the structure went unnoticed by at least a century of formal and informal archaeological listings. The accidental discovery of this ancient² object and its subsequent restoration acquires a special significance when seen through the framework of the ongoing practice of its restoration.

In this essay, we locate the site of this discovery and the actors in the preservation process. We argue that the relationship between the two - site and conservationist - is a conflicted, albeit fleeting, one. Moreover the fleeting character of this relationship can be revealed only through writing the process. By conceptualising the project as a series of decisions executed at the level of the discipline of conservation - rather than mandated by the object itself - this paper provides a close reading of the structure in a future urban context, arguing that the discipline is driven by a vision for Delhi. Here we contrast the work of the conservationist³ with that of the historian for determining the point of origin of a monument in order to understand its autonomous history as emblematised by the work of Alois Riegl. Conservation legislates meaning induced by the modern subject's engagement of the monument. As this engagement is historical, so too is the practice of conservation, even as it attempts to overcome its own historicity. This tension is manifest in the present-day mandates of conservation that are fulfilled by cultural institutions but are made real by disciplinary consent.

A transhistorical site

The current city of Delhi is an aggregate of seven centuries of history, and the logic of its modern urban planning often makes way for a historical artefact that may find new purpose as a

traffic roundabout or a folly inside a public park. The Nizamuddin neighbourhood (figure 1) in contemporary South Delhi bears traces of much of Delhi's built history, with shrines and tombs dating back to the thirteenth century AD. Following the burial of the Sufi saint Nizamuddin⁴ at this location; the site gained a special spiritual significance. Several important people from the city chose to be buried in this vicinity over the next few centuries, converting the site into an extended funerary landscape. Located within this site (figure 2) now are the historic shrine to Nizamuddin; the Nizamuddin *basti* - a thirteenth-century historic neighborhood that developed around the shrine and continues to thrive; the Mughal Emperor Humayun's tomb⁵ built in the fifteenth century (figure 3); and Sundar Nursery (figure 4) - a large twentieth-century nursery spread over 67 acres⁶.

This extended landscape is currently the focus of an ambitious restoration project by the Archaeological Survey of India (ASI) and the Aga Khan Trust for Culture (AKTC), a project that began with the restoration⁷ of the Humayun's tomb gardens in 1997. Between 2003 and 2007, the project further expanded⁸ its scope to encompass the restoration of Humayun's Tomb, the adjacent Sundar Nursery and the historic Nizamuddin *basti*. Following international convention,⁹ a decision was made to restore Humayun's Tomb back to its fifteenth-century condition. The landscape around Humayun's tomb - the Mughal *charbagh*¹⁰ - was restored back to the nineteenth-century condition when it was modified by the British. As the project expanded, it was also decided to restore the Sundar Nursery back to the 1920s when it was a fully functional nursery, (figure 5) while the individual tombs contained within will be restored to their sixteenth and seventeenth-century conditions. In the future, the landscape immediately around each tomb will also be redesigned in a "Mughal" style of *charbaghs*. Thus, the site is a transhistorical landscape, in which different "restored" historical periods are juxtaposed for the viewership of the modern subject. (figure 6) In fact, the site becomes transhistorical only as it is confronted by and modified by the conservationist.



Figure 1. Delhi and its immediate environs, 1909, red highlighted by authors. (Murray 1909)

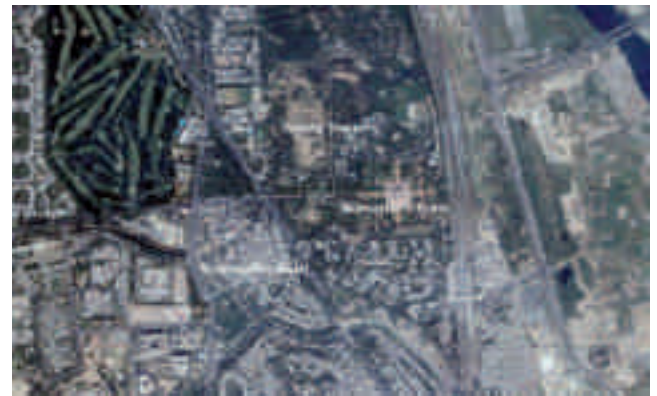


Figure 2. Satellite image showing location of three parts of AKTC project. (Google Earth)



Figure 3. View of Humayun's Tomb (restored). (Pandit and Schmidt 2009)



Figure 4. Entrance to Sundar Nursery. (Pandit and Schmidt 2009)



Figure 5. Sundar Nursery showing plantation. Note the tomb in the background. (Pandit and Schmidt 2009)



Figure 6. Trail connecting the various historic structures in Nizamuddin precinct. (Overlay by Pandit and Schmidt 2009)

Restoring the nursery, restoring meaning

Prima facie, the ASI's decision to reinstate the nursery's original program from the 1920s, and to restore the tombs to their condition in the sixteenth and seventeenth century appears to be a tactical decision based on an immediate threat to the site. A new highway extension (NH 24) planned by the Delhi Development Authority proposed to slice right through the Sundar Nursery. A monument-focused approach of valorisation of the structure, if pursued further, could have led to a design solution where the highway would weave its way between the monuments, creating pockets and islands of historical significance as it passes through. The only way to oppose this construction was to establish the historical specificity of the site or the landscape, both its ancient history as a funerary site as well as the relatively modern one drawn from its use as a nursery. The potential highway problem thus at a deeper level afforded an opportunity for the project's development as a landscape conservation project. By identifying and documenting the historicity of the contiguous landscape, it became possible to assign a collective meaning to the site, and resist its division - both literally and figuratively.

As the site's collective meaning had been affirmed, internal contradiction in Sundar Nursery reveals how the monuments provided leverage to attribute to the whole site a jurisdictional status. By virtue of being an operational nursery, the land was under the control of the Central Public Works Department (CPWD) of the Government of India from the 1920s, and the ASI's jurisdiction on the property was limited to the tomb structures and the land surrounding them up to a 100 metre radius. By virtue of the legal framework under which the ASI operates, a protected architectural monument is privileged over any landscape that contains it. On the one hand, this means that the ASI has enough judicial authority to confiscate ancient structures from other owners. On the other hand, this also means that the idea of an *historic landscape* is missing from the legal toolkit of the conservation architect. If the site - given its own particular history and its proximity to a World Heritage monument, as well as its location within the historic Nizamuddin area - were to be appropriately protected, it would necessarily have to be in control of the ASI, the agency qualified to protect it. The only way for the ASI to claim a jurisdiction over the entire site was by simultaneously assigning equal value to all the monuments located within the compound, declaring it a historic complex.

Thus the landscape could be preserved only by sublating its relationship to the monuments it contains. The ASI's strategy of achieving this was to declare the entire Sundar Nursery a historic site and embed the historicity of the object within its landscape. It was declared to be a critical component of the restoration plan

for the precinct, and the ASI and AKTC offered to make this park accessible to the public, a "Central Park" for Delhi (figure 7). This effectively made the project relevant not just for its historicity, but also because of the public space that it created, a move that allowed the restoration of the site to immediately become relevant to the city of Delhi itself.

Yet, the discovery of a "new" monument within this contiguous landscape of monuments helps us transcend this *prima facie* - public - case for conservation. Since the monuments, on equal ground with one another, help legitimise Sundar Nursery as a restoration project, the inception moment for the modern life of the newly discovered structure - the moment of its discovery - therefore has embedded within it a call to intervene along these lines, only in so far as it is confronted by the conservationist. As the modern subject emerges as the only viewer who can historicise this structure, this historical logic concretely translates into a disciplinary logic that seeks to expand its authority by an aggregation of conserved examples. Its location within Sundar Nursery made this call for intervention an urgent one - significant restoration work had already begun within a year of its discovery. Its identity as an *ancient*¹¹ structure alone cannot explain such a response; indeed there are several structures in Delhi and elsewhere of greater historical significance and in a better state of repair that are being neglected by the ASI.¹² The compelling nature of this structure is a direct function of its location.

Making the Mughal Pavilion

The structure under question had lapsed from documentary memory at the time of its discovery. A Delhi Heritage listing carried out by conservation architects for INTACH¹³ in 1999, was subsequently published as a two volume report titled, *Delhi: The Built Heritage - A Listing*. While this listing documented over 1200 structures in Delhi, the anomalous structure was missing from the listing. It was only in 2006, when restoration work began in the Sundar Nursery that the structure was re-discovered. This newly discovered ancient structure was about 8 metres by 8 metres in size, and in a state of absolute ruination. The walls showed significant structural deterioration, the jamb lining had disappeared, and no indication of the details of the original latticework remained. If the form of the structure was "lost", so was its meaning. There was no indication of the identity of the person buried within this structure. The structural failings meant that the formal elements that gave meaning to the tomb - the vault and the latticework - were lost too. The structure, devoid of formal and functional identity, presented a challenging condition - the ambiguity of restoring a structure with an incomplete knowledge about its past, coupled with the opportunity of assigning new meaning to a historical structure.



Figure 7. View of Sundar Nursery. (Pandit and Schmidt 2009)

Conservation architects created the space for the reinvention of the structure. The AKTC drew the structure out of the nature that had engulfed it, the vault was rebuilt, awnings were added on all sides, and a large platform was built around it (figures 8 and 9). The missing latticework was recreated and reinstalled based on samples available from other structures on the site - structures that were perhaps built in different periods. In keeping with its "Mughal" origins, a *charbagh* is to be installed around it in the near future. As the form was recreated - and even reinvented - speculatively, so was its meaning. It was decided to rename the structure the "Mughal Pavilion" - a de-sacralised name for a former tomb. The name of the structure belies a contradiction - a "Mughal Pavilion" is not exactly a new architectural type, but in this case, it was retroactively deployed to signify a structure that was more a result of the logic of conservation than of historical rigor and accuracy in its reconstruction. In the face of the claim for authenticity made by conservation practice, this structure lays bare a problem that constitutes this practice.

"Unintentional" restoration

How does the Mughal Pavilion reveal such a problem? Alois Riegl in his seminal 1902 essay, *Modern Cult of Monuments: its Character and its Origins*, was one of the first art historians to understand the preservation of monuments as a matter of present-day value ascription to works from the past, and he traced how this human relationship to monuments came to be throughout history. Riegl distinguishes between *intentional* monuments and *unintentional* monuments - the first being a commemorative structure that preserves a moment (with 'a claim to immortality'), and the second, growing out of the Renaissance - which he sees as the proto-origins of Modernity - interest in monuments that are designated as "important" enough to conserve long after their commemorative meaning ceases to resound (Riegl 1902, p. 38). These two categories grasp the subjective component of monuments or how they are meaningful to certain people throughout history. Through Riegl, it becomes clear that the way monuments are viewed by modern subjects is "historical"; that is, they possess a certain "historical value" that is derived from the isolation of an object from the conditions that gave rise to it.

It is possible to understand the dynamic of the Mughal Pavilion in



Figure 8. Ongoing restoration process inside the structure. (Pandit and Schmidt 2009)



Figure 9. Ongoing restoration process outside the structure. (Pandit and Schmidt 2009)

these terms - the identification of what is "historically valuable" about the Mughal Pavilion has been a problem for conservation. There is not much information about what the structure originally commemorated, and yet those origins are precisely the ones that must be restored by way of the restoration of the monument. What can the restoration of the structure offer Sundar Nursery in its bid to become the central park that the ASI desires it to be? Conservation practice makes answering this question so straightforward that it obscures the question almost entirely. It is only through writing that the question too is unearthed, to reveal a process of decision making about history that is mandated by the future urban setting of Delhi.

The Mughal Pavilion is a conservation conundrum because of its historicity, which is concerned above all with locating its origins and retrofitting the structure to those perceived origins. As it is a typical modern "unintentional" monument, conservationists must locate these origins and hypothesise the commemorative value that it once had and the context in which it once operated. However, considering that in the process of restoration, the structure ceased to be a tomb and was assigned a new "pavilion status," this hypothetical commemorative value might be impossible to estimate.

While Riegl's modern subject is concerned with the present-day meaning of a historical monument, the conservation discipline imposes constraints on the institutions whose work it is to restore the building and the site around it. In the case of the Mughal Pavilion, the tension occurs between what could have been and what is being done. In fact, the limits to the imagination of the monument and those of conservation practice as a discipline are co-constitutive, although it must be borne in mind that according to Riegl, these are symptomatic of a broader consciousness of history in a given time. For the conservationist imagination, these limits take the form of disciplinary restrictions on practice, while for Riegl, they become the very things that place the "modern subject" into its peculiar relationship with history.

The overriding project of conservation and its three separate "sites" - Humayun's Tomb, Nizamuddin Basti and Sundar Nursery - involves making choices about what is "culturally significant", according to Project Manager Ratish Nanda³⁴. However, the work used to determine what is culturally significant is already digested in the scope of conservation practice.³⁵ Clearly, concrete decisions were made to conclude that the ruinous structure discovered on the site of the Nursery would be restored into pavilion status.

'Rubble alone leaves no trace'

One need only look at that discovery to put conservation practice

into perspective: 'rubble alone reveals no trace of the original creation.' (Riegl 1902, p. 33). As the structure lay amongst trees and shrubs, at once buried by and a full-fledged part of nature, the discovery of the monument in the middle of Sundar Nursery would have posed a question: what to do? At the formulation of this question, and at the behest of the disciplinary logic of conservation practice to highlight and maintain the "traces of the original creation," extensive work would have to be done to renew the structure's status as a monument. Leaving the structure as it was or removing it, to name two "extreme" possibilities, would be out of the question on the part of the AKTC, ASI and CPWD.³⁶ In Riegl's pithy statement, *rubble or ruins* - the most "authentic" marks of a structure's historical life - in fact do no service to remind us of that moment of its genesis (as an "intentional monument") and thus, do not convey the meaningfulness in recognising its origins (<http://asi.nic.in>). Discovery is precisely the point at which such origins are deemed historical, and the structure is formed to mimetically represent their origin so that they may come "back to life". The discovery of a ruined pile is an observation that has no social meaning: it is only when the ruins are resuscitated to refer to their own past that a real discovery happens (figure 9).

As the potential historical value of a wide array of monuments was increasingly appreciated in the nineteenth century, so too were laws enacted to protect the monuments (Riegl 1902). It is possible to say that the discovery of the Mughal Pavilion, off the books for seemingly all our life can be attributed a legal character. That is to say, conservation practice restores monuments by making them legal objects and normalising the conservationist's relationship to them. A "Monument" status today is nothing less than a matter of legality, and this legal status exists to preserve meaning. The law already ensured that the monument should be restored, as though the law can conceive of a monument as such before it becomes one again. The ASI, an agent of the Ministry of Culture and mandated to 'protect cultural heritage' would anticipate the monumental status of a ruinous structure (<http://asi.nic.in>), either for its own historicity or that of its site. The Mughal Pavilion, then, having been located in a web of legal decisions, which in turn legitimise design decisions, was conserved according to a practice that need not imagine outside of this rubric; and this is precisely the work conservation practice sets for itself - the smooth preservation of everything it can imagine. Conservation practice bears an uncanny resemblance to legality - both are forms of knowledge that themselves define the limits within which they can operate.

As it stands now, even without archival photos, the *charbagh* landscaping³⁷ around the pavilion complicates the monument and inserts a wedge in the subtle cracks of conservation practice. The Mughal practice of laying claim to a piece of land by placing a tomb-garden upon it cannot be formally evoked by the actual

restoration of that tomb-garden.¹⁸ Newer programs that were instilled after Mughal rule, such as the British use of the Nursery, would have overrun the original design. Besides the fact that the landscape would have faded away as the plants died out of neglect, the *charbagh*'s own commemorative value cannot be reproduced.

Landscape slightly complicates Riegl's discussion as something that might desire to be restored and conserved, but must be entirely reconstructed to visually refer to its historic form: 'Age-value manifests itself...tellingly, in the corrosion of surfaces, in their patina, in the wear and tear of buildings and objects, and so forth. The slow and inevitable disintegration of nature is manifested in these ways.' (Riegl 1902, p. 32). The design of a commemorative garden in the 1600s is easy enough to conceptualise as a historical fact, but hard to reinstate. If "age-value approaches" to conservation seek to highlight the look of wear, a landscape cannot be preserved as such. The landscape's ability to convey this "age-value" is compromised.¹⁹

Any landscape design in the case of the Mughal Pavilion would add newness as much as it would add beauty. And yet, this "newness" value, another notion of Riegl's, might be precisely the thing that allows us to understand the Mughal Pavilion in a new way. Riegl says, 'Practical use-value corresponds aesthetically to newness-value: for its own sake, age-value will have to tolerate, in the present state of its development, a certain degree of newness-value in modern works.' (1902, p. 32). If a tomb were originally placed in a pleasure garden, one can look upon the discovery of the Mughal tomb as an ironical means to restore the garden that could only be highlighted by the ruinous tomb. But the relationship then gets inverted, as the *charbagh* is a means to restore the tomb. The landscape has a new relationship to the tomb-pavilion, and it is 'intentional':

Intentional commemorative value simply makes a claim to immortality, to an eternal present and an unceasing state of becoming. It thereby battles the natural processes of decay which militate against the fulfillment of its claims. The effects of nature's actions must be countered again and again...The intentional monument fundamentally requires restoration. (Riegl 1902, p. 32)

The role of landscaping in the Mughal Pavilion, indeed, its usefulness, is to commemorate the tomb that it once was. In light of this formulation the landscape bolsters the logic of the restoration outcome of the pavilion. A new *charbagh* in Sundar Nursery, the site of the Mughal Pavilion, in turn, reaffirms the meaningfulness of the site, which reaffirms and perpetuates the "train" of conservation. The pavilion reveals a problem, but it is also an affirmation of the discipline, simply because it can be.

The parameters of practice are both historically constituted and

"automated" through various agencies sent forth to handle them. This is something that Riegl was not concerned with, and yet it comes to bear heavily on the conservationist's apprehension of the monument.²⁰ Having located the structure and examined the relationship that conservation creates between a monumental site of preservation and these parameters of practice, we can now identify why the Mughal Pavilion is "problematical," a complicated issue. This can be achieved only through understanding the structure in a given site, and not as an abstract monument. If the current scale of monumentality is set to the structure, this scale of the "monumental" must be enlarged to encapsulate the site, a larger scale at which meaning is accessed. By extension, the site works in favor of a vision of Delhi. Whatever the old relationship between the tomb and garden, the Mughal Pavilion has provided a new one. This is a crack in conservation practice, as it cannot help but be entirely ahistorical and represent a form of a historical past in garden design - but this is also the closest thing it has to get outside the limits that it sets for itself.

References

Murray, J. (1909) *A Handbook for Travellers in India, Burma, and Ceylon*, London: J. Murray

Riegl, A. (1902) 'The Modern Cult of Monuments: Its Character and its Origin', *Oppositions*, vol. 25, pp. 21-51

Endnotes

The authors would like to acknowledge the support of the MIT department of Architecture, Cambridge MA and the Aga Khan Trust for Culture, Delhi, India in making this paper possible. We would particularly like to thank Prof. James Wescoat Jr. of MIT and Architect Ratish Nanda of the AKTC.



¹ A cloister vault is a vault resulting from the intersection of two barrel-vaults crossing in a right angle.

² "Ancient Monument" means any structure, erection or monument, or any tumulus or place of interment, or any cave, rock-sculpture, inscription or monolith, which is of historical, archaeological, or artistic interest and which has been in existence for not less than 100 years. See Government of India, The Ancient Monuments and Archaeological Sites and Remains Act, 1958 (No. 24 of 1958)

³ By "conservationist," we imply a practitioner engaged in historical conservation and preservation, making technical, aesthetic and historical choices. Often, the said practitioner is a conservation architect, but the term also describes engineers and craftsmen on the one hand, and heritage activists and policy makers on the other.

⁴ Hazrat Khwaja Nizamuddin Auliya (1238 - 3 April 1325) was a famous Sufi saint of the Chishti Order in South Asia. His shrine is located in a historic neighborhood named after him, and it a very large spiritual and tourist attraction.

⁵ Humayun's tomb is a World Heritage Monument that attracts over a million visitors each year. It is perhaps the most celebrated Mughal tomb after the Taj Mahal. Humayun too chose this burial site for its spiritual value.

⁶ Sundar Nursery was developed in the 1920s and 1930s by horticulturist Percy Lancaster to be used as a site to experiment with various tree and flower types that could eventually serve the greening of the new capital city, and it serves that purpose to this day. (figure 7)

⁷ This was the Aga Khan's "gift" to India on the 50th anniversary of its independence.

⁸ The project expansion was in accordance with the vision of the Aga Khan to intervene in ways that will make positive contributions to the lives of people living in the neighborhood and the city.

⁹ Most notably UNESCO's "Convention Concerning the Protection of the World Cultural and Natural Heritage", 1972

¹⁰ *Charbagh* or "four gardens" is a Persian style quadrilateral garden that is divided into four parts.

¹¹ Ancient by its legal definition and by its appearance.

¹² Since this structure was not listed as "protected," there is very little else to explain why it would be preserved except for its specific location within the site.

¹³ The Indian National Trust for Art and Cultural Heritage, a trust consisting of prominent citizens that seeks to "...sensitize the public about the pluralistic cultural legacy of India and to instill a sense of social responsibility towards preserving our common heritage." http://www.intach.org/mission_intach.htm

¹⁴ Ratish Nanda, in conversation. 8th January 2009. Humayun's Tomb, Delhi.

¹⁵ Indeed, what types of structures get conserved at all must be handled by this logic. A controversial decision by the team was to reconstruct a relatively late-coming mosque on the site. Another tomb just outside the edge of nursery, and possibly a part of the same complex, is not part of the conservation plan, as its immediate surroundings are currently being squatted upon by a large community of rag-pickers. On the other hand, Bharat Scouts, a large property contiguous to the Sundar Nursery that contains several tombs, is not being included in AKTC's present scope of work only because of a long drawn court case associated with the property.

¹⁶ Indeed, as mentioned previously, according to the legislation that designates the site of Sundar Nursery protected, it would have been illegal to remove it or allow for further destruction of the monument. s.(4) Ancient Monuments and Archaeological Sites and Remains, Act No. 24 of 1958

¹⁷ Here, we specifically mean the *charbagh* landscaping that has been planned around the Mughal Pavilion, and not the larger project of the restoration of Sundar Nursery.

¹⁸ The authors would like to thank Professor Rahul Mehrotra for this detail.

¹⁹ For, the life cycle of plants is short, that of rocks almost eternal, and of water, it is binary - it is either there or it isn't.

²⁰ A widely presumed form of consumption of the monument, tourism, for example, is a similarly "legal" activity.

III. Writing culture through technologies

7. **Beyond Use: Material Consciousness and Creative Engagements with Urban Infrastructure**
Susanne Seitinger and Tad Hirsch

8. **Sensor Narratives**
Orkan Telhan

9. **The Internet and the City: Blogging and Urban Transformation on New York's Lower East Side**
Lara Belkind

7. Beyond Use: Material Consciousness and Creative Engagements with Urban Infrastructure

Susanne Seitinger and Tad Hirsch

Consider an example of infrastructure from the American southwest: acequias. First built by the Spanish hundreds of years ago, these networks of open ditches provide water to approximately 800 farming and ranching communities in northern New Mexico. They are directly managed by users who maintain and repair the system and make key decisions about water allocation. The acequias play a central role in the social fabric of the communities where they operate, organising

users into committees and associations. The acequias are also implicated in identity construction, with users routinely referring to “acequia culture” and to themselves as “acequia people” (Hirsch and Anderson 2010).

Contrast the relationship of acequia users to their waterways with the relationship of a suburban resident in Phoenix with the municipal water system. Though acutely aware of resource



Figures 1a & b. Acequias, Albuquerque New Mexico. (Hirsch 2009)

management issues, this resident's material experience of accessing water differs vastly from acequia people's experience. With a simple turn of the tap water flows into a glass. Despite being surrounded by material expressions of water systems such as meters, manhole covers, public measures to reduce usage, this user remains removed and seemingly helpless in the face of an impersonal, hidden network of conduits and pipes. Impersonal utility companies preside over a rational and efficient water

distribution system that makes it difficult for the average user to pinpoint how infrastructure shapes a key resource in the everyday life of the city.

Like the second water system describe above, 'modern' utilities in most Western cities are removed from everyday social experience. Hidden underground and inside the walls of our buildings, they are presented as purely functional mechanisms;



rational responses serving contemporary urbanites' creature comforts. Their interface with social and public spheres has been reduced to a few very specific connections. The resources may be continually present, but the infrastructure's role in shaping social relations and the patterns of everyday life is as untraceable as a radio wave.

In recent years, infrastructure has become a central site of concern for urban researchers representing a variety of academic disciplines including civil engineering, architecture, urban planning, and anthropology. One may discern several strong themes in the literature. There is a sharp distinction drawn between examining infrastructure's creation and its use. Anthropological investigations of power and water utility users (Star 1999; Mainwaring et al. 2004) leave unexplored questions of how these systems come into being. They are presented as an already existing material situation that shapes urban life, but are not themselves altered by their users.

While studies of 'large socio-technical systems' situate infrastructure development in specific social and historical contexts (Hughes 1983; Melosi 2000; Edwards et al. 2007), they generally stop short of considering how these systems are experienced in everyday life. When researchers do consider the everyday role of infrastructure, they emphasise how banal and boring these systems are (Star 1999; Dourish & Bell 2007). There is also a tendency to assume a "normal" use of infrastructure in which various water, power, and transportation systems are present but unacknowledged by their users except in moments of crisis or rupture, such as the massive power failures on the east coast of North America in 2003 (Graham and Marvin 2001). Exceptions to the rule are generally framed in terms of ongoing need for repair and maintenance (Graham and Thrift 2007). These approaches emphasise the role of time (Lynch 1972), but they do not necessarily link it to the experience of specific actors.

In our view, previous studies miss the ways that grassroots actors actively and creatively engage with infrastructure by appropriating, reconfiguring and extending existing systems. This essay contributes to the literature by focusing on examples in which individuals and groups alter or augment urban infrastructure. While such "extraordinary" or "beyond use" engagements represent a relatively small fraction of all encounters with infrastructure, we suggest that they constitute meaningful moments in people's experience of their physical and material worlds. In particular, our examples demonstrate a 'material consciousness' (Sennett 2008) among extraordinary practitioners. We use this term to describe an understanding of and orientation towards the built environment that recasts the individual as an active shaper of her physical surroundings rather than a passive user of already-existing urban form. This

stance empowers actors and raises collective awareness of the contingent nature of urban infrastructure. We take infrastructure to mean the physical structures that provide the material underpinnings for urban life. This expansive definition extends infrastructure from the traditional categories like water, power, and transport systems to include communications networks and indeed much of the built environment (for example: sidewalks, billboards, facades). We are particularly concerned with those material aspects of the built environment that go largely unnoticed in everyday life, despite their centrality in shaping urban experience.

The paper brings together several examples from different domains where infrastructure is brought to the forefront of consciousness and presented as a site for grassroots action. We juxtapose DIY enthusiasts building their own energy harvesting technologies, activists building custom communications systems, and artists appropriating the built environment for creative expression. For each case, we focus on the motivation behind the actors' intervention as much as on the intervention itself and any effects to highlight the agency and perspective of the actors and their ability to impact change. Having thus laid out our evidence, we then turn to a more general discussion of grassroots appropriation and extension of urban infrastructure. We suggest that the described interventions represent a mode of writing the city in the literal sense of physically leaving one's mark on an environment and in a more abstract sense of externalising and making public a particular perspective on urban life. We will extend this analogy by arguing that the examples of creative misuse are predicated on a consciousness that is orientated towards the built environment, and a technical literacy that enables the actor to extend, augment, or replace existing infrastructures.

DIY energy harvesters: home brew energy hackers

Rising prices and growing concern about environmental impacts have heightened public awareness of the ways that energy is produced, distributed, and consumed. For many, newfound interest in energy systems has translated into purchasing fluorescent light bulbs and energy-efficient appliances. A growing number of urbanites are also turning their attention to energy infrastructure. Utility customers have expressed a desire and willingness to pay for wind-generated electricity, and solar panels sales have seen steady growth in recent years. Communities have emerged around the topic of DIY energy harvesting. Magazines such as, *Home Power: The Hands-On Journal of Home-Made Power* demonstrate how to become wholly or partially self-sufficient by installing intermittent energy sources such as PV cells, waterwheels or wind turbines¹. Some individuals are simply

interested in saving money or improving their environmental footprint within the general framework of existing urban systems. Other communities seek to dissociate themselves entirely from the environmental and social impacts of urban life-styles by disconnecting from collective infrastructures (Mainwaring et al. 2004, Graham and Marvin 2001; Hess 2009).

Figure 2 depicts a homemade waterwheel that a practitioner built to save money and increase his independence from the local utility provider. The device would generate enough power to fulfill one third of his annual power needs if inserted in an existing stream near this practitioner's house. It is entirely homemade and does not conform to any legislated standards. In order to integrate the waterwheel into the existing natural



Figure 2. Homemade Waterwheel, Koblenz, Germany. (Photograph included with permission)

system of the stream as well as the electrical grid, this homebrew infrastructure builder must engage with a host of rules and regulations that address environmental concerns, safety provisions and economic incentives and protections for different individual and institutional actors.

While independent power generation may improve our environmental footprint, the predominant standard for

power provision remains a large-scale network of power lines. Connecting multiple large-scale and small-scale systems to each other, poses a significant challenge. In particular, intermittent energy sources require grid-tie inverters to connect to the main electrical grid. These present a large cost. Some enthusiasts build the entire system themselves while others buy parts from their utility provider. Laws and subsidies for these different approaches vary widely from state to state and country to country leading to a patchwork of local energy harvesting systems. It is unclear how much influence individual power harvesters will have over the evolution of new 'smart' power management infrastructures. Utility providers have been championing Smart grid technologies² to load-balance their networks as more large-scale intermittent energy sources are installed (for example, wind farms). For utilities customers, Smart grid solutions require smart meters and devices that allow preprogramming of energy consumption patterns. These configurations will become even more fine-grained as individual electrical appliances begin to be designed with more control systems for power management³. The contradiction between centrally managed systems for heightened efficiency across the network and individual efforts to gain independence may not always lead to common cause among various actors⁴. It is important to note here that individual augmentation efforts can also damage networked systems. For example, connecting to the electrical grid without proper safety precautions endangers utility electricians in the case of a power outage. When power failures occur the utility company can disconnect a certain portion of the grid for maintenance work. If a local user has an intermittent source of power connected to the grid there will still be live portions of the network that utility workers cannot shut down or worse may not know about and suffer injury.

Local interventions can undermine the viability of entire systems and cannibalise shared resources. For example, individuals and institutions throughout the American West often dig wells to avoid fees and regulations governing surface water use. Use of these wells is generally uncoordinated with other stakeholders, which can lead to "over drafting": situations in which water is pumped out of the aquifer faster than it can be recharged. In the short-term, over drafting leads to water shortages; in the long term, the aquifer may collapse permanently damaging the water source. Endangered collective resources further motivate individuals to disconnect from larger networks to secure their own life-style. Whether politically, economically or socially motivated these movements have been documented around the world and called 'splintering urbanism' (Graham and Marvin 2001; Hess 2009). From gated communities to autonomous settlements in remote areas, splintering allows citizens to withdraw from certain co-dependencies.

Juxtaposing DIY energy harvesting practices with large-scale electrical grids raises a number of design issues. For example: What design choices would make it easier to integrate smaller, localised solutions? Do maintenance and repair models exist that could slowly incorporate DIY taps or feeds into the overall network? What is the potential for effectively layering formal and informal networks? The answers to these questions are of course grounded in context and cannot be answered wholesale.

In the past, wholesale integration of infrastructures and their rationalisation was celebrated. Looking back on history one of the most significant contributions to infrastructure design was made by the British engineer Joseph Bazalgette who built the embankment in London which combines road, sewer, water, subway, and flood protection in one layered system. At the time, this approach presented a significant innovation because previous, private initiatives had led to a messy layering of competing networks within domains such as gas or water and across networks. Bazalgette's intervention materially reconfigured the networks in London at the turn of the century through his own ability to envision a particular arrangement of systems. We argue that DIY-ers in the energy domain are helping to reframe all our expectations of power infrastructure by bringing it back into our material consciousness. Thus, energy grids will become democratised sites for debating and co-constructing the energy production and consumption networks of the future.

Radical techies: creating quasi-independent activist communications systems

Communications infrastructure plays a leading role in the life of the contemporary city. As has been widely reported, near-ubiquitous wireless connectivity – particularly through mobile phones – has transformed urban life, creating new social practices and new business opportunities. Seeing communications infrastructure as a key to future economic development, governments around the world are rolling out stimulus packages to spur development of broadband Internet.

New communications infrastructure has also had dramatic impact for social movements and civil society organizations around the world. Contemporary political movements rely heavily on mediated communications technologies to coordinate flows of people, information, and resources. Activist adoption of these technologies is enabled in part by appropriation of commercial services – like Facebook and Twitter – for political purposes, and in part by the innovative work done of movement engineers – self-styled 'radical techies' who create new communications technologies for activists.

Radical techies set up "pirate" radio stations and SMS services that allow activists to communicate and coordinate action during mass mobilisations. They establish "independent media centers" – physical locations that provide equipment, technical expertise, and press credentials to help grassroots journalists create and distribute stories for newspapers, public access television, community radio, and the Internet. They build secure websites through which organisers plan campaigns, coordinate logistics, and disseminate propaganda. They create open source software tools that are shared and adopted by advocacy organisations around the world. Projects like these provide the material conditions for the transnational activist networks that enable and equip urban protest movements around the world. In some cases, they offer new capabilities that are not supported by existing systems and which may predict broader technology trends. For example, the contemporary citizen journalism movement can trace its roots to activist communications software created in the late 1990s, while the concept of micro-blogging developed by Twitter was informed by earlier activist SMS projects (Hirsch 2009). In other cases, activist communications systems replicate existing services. For instance, collectives like Riseup (<http://riseup.net/>) and Mayfirst/People Link (<http://mayfirst.org/blogs>) provide email, webhosting and electronic mailing list to activists around the world. While these services are hardly unique, they are valuable alternatives to similar offerings by large telecommunications conglomerates, and are created in response to a different set of design criteria than their commercial counterparts.

While virtually all new infrastructure projects 'extend and multiply' existing systems (Graham and Marvin 2001), activist communications projects often maintain complicated, even parasitic relationships with existing infrastructure. For instance, posters are downloaded from activist websites that run on servers and bandwidth appropriated from academic networks. They are printed and copied on office equipment commandeered by activists with corporate day-jobs, and distributed through networks of radical bookstores and community centers run by activist squatters in formerly abandoned buildings. In each of these cases, activists appropriate excess capacity in existing infrastructure for political ends without the knowledge or permission of their owners. These projects complicate notions of legality with both pragmatic and ideological considerations: in considering a solution, designers often go beyond legalistic binaries to wonder: "Can we get away with it?"; and "Will anyone be harmed if we do?" Additionally, the explicitly social nature of activist enterprises can lead authorities to tacitly allow interventions to occur despite noncompliance with local ordinance or corporate policy, as sympathetic office managers and network administrators choose to turn a blind eye to occasional shortages of copier toner or increases in network traffic.

Operating in the face of often overwhelming opposition also translates into a willingness to take risks. Activists generally expect their communications systems to fail, either through direct interference or technical snafu. Accordingly, designers place an emphasis on creating redundant systems. For example, activists will build websites, low-power FM stations, and SMS broadcast systems all to support a single protest to ensure that information continues to flow, even if one or more of those systems goes down.

Artists: making marks , rewriting urban spaces

City residents are typically unaware of the infrastructures they use daily like sidewalks, signage, and urban furniture. Some groups like skateboarders, graffiti creators and artists bring a different sensibility to their encounters with the urban fabric. Instead of ignoring infrastructure, they enter into a creative dialogue of



Figure 3. Indymedia collective hosting a free radio broadcast in 2004 at Mato Grosso Federal University in Cuiabá, Brazil.
(http://en.wikipedia.org/wiki/File:Indymedia_Cuiabá.jpg)



Figure 4. Graffiti in Bristol, UK.
(http://en.wikipedia.org/wiki/File:Bristol_indymedia.jpg)

misuse (some would say abuse) with the ordinary structures of the environment. Withholding comment on the positive or negative outcomes of these practices, we aim to show how they constitute an engagement with infrastructure “beyond use” and how they contribute to the collective image of the city. We draw examples from three groups: skateboarders, graffiti writers, and artists working in urban environments including public spaces.

Graffiti writers and skateboarders select specific sites in urban areas according to both functional requirements like “rideability” or “paintability”, and aspirational goals including challenge and visibility. They also repurpose specialised infrastructure such as railings, stairs, fences, benches, urban furniture and more. Their use of those built elements in sophisticated maneuvers uncovers hidden affordances that were not anticipated by the designers. ‘Skaters have the knack of taking the blankest spaces, the most mundane features, and making them a stage. [...] In doing so, it disrupts any “proper” logic of function, of transit or bare rationality’ (Tonkiss 2005, p.144). Through these practices, boarders and graffiti writers temporarily assert ownership over certain spaces in two ways. First, their presence in a space changes the perception of the affordances provided by that location. Second, they have a longer-term impact through the marks they leave behind. These traces are the material evidence of an engagement with the urban fabric that extends beyond normal or functional engagements with spaces.

Artists who engage with public spaces are strategically aware of the impact material reconfigurations may have for the broader population. Like graffiti writers or skateboarders, they repurpose specially selected elements of the built environment to convey messages that disrupt the business-as-usual activities in those spaces. For example, an artist group called Global Security Alliance has painted helicopter shadows on pavements in areas of various cities with perceived high-crime rates. These “deterrents” draw an analogy between distressed urban areas and war zones. Unlike street markings that typically intend to order, these helicopters led to increased debate about perceived safety versus recorded incidents in urban neighbourhoods. They highlight the irregularities and differences in perception of safety among individuals and various groups. At the same time, the helicopter shadow contextualised often abstract, media discussions about global security in a concrete urban space⁵.

Another way to reframe people’s perspective on spaces was created by the group Yellow Arrow. People could place anywhere in the city and link with content retrievable by SMS. In many cases, these stickers highlighted personal relationships between people and their awareness for urban infrastructure. For example, they tagged bridges, streetlights and signage to highlight their aesthetic qualities or their role in the fabric of the city. Temporary ephemeral technologies may also impact spaces by latching onto



Figure 5. Tram with Throwies. Graffiti Research Lab. (Excerpt of photograph by http://flickr.com/photos/urban_data/243453680/)



Figure 6. Laser Tag on a building façade. Graffiti Research Lab. (http://www.flickr.com/photos/urban_data/396087351/)

existing infrastructures, particularly at nighttime when daytime patterns are interrupted. Artist collectives like Graffiti Research Lab (GRL) (<http://graffitiresearchlab.com/>) and innovative design groups like Troika (<http://troika.uk.com/about>) deploy systems that facilitate temporary rewritings of urban spaces. For example, GRL's Laser Tag and Troika's SMS projector make it easy to overlay images onto large-scale surfaces in urban environments. Rather than focusing on the most difficult-to-reach location as with analog graffiti, these artists focus on selecting sites on city skylines or important buildings. The SMS projector allows for a temporary rewriting of signage.

GRL's Throwies are individual pixels (LEDs, battery, magnet) that can be homemade and easily attached to any metallic surface in the city. Unlike analog graffiti, however, these systems only work temporarily at night, but they are an important commentary on

mainstream display technologies that are used for advertising or to illuminate the official city skyline.

All the projects in this section share an ephemeral, temporary quality that enables appropriation of existing infrastructures like urban furniture, transportation technologies or other elements of the built environment. Whether at the large scale of an entire building façade or at the small scale of a playground, these interventions transform hidden infrastructures into visual and visible sites of communication and spectacle. They require a re-scripting of the environment through making durable or ephemeral marks on the spaces we inhabit. This activity requires an ability to read urban spaces with heightened awareness. And in turn other residents can experience the gradual accumulation of multiple texts legible in the city over time.

Discussion

We have highlighted moments of intervention in which citizens take up tools to change the material conditions of their lives. We suggest that these examples hinge on 'material consciousness' (Sennett 2008) because these actors also 'become particularly interested in the things [they] can change' (Ibid., p120). In the context of infrastructure, material consciousness is an attention to one's physical environment as a shaper of experience, and as a potential site of action. In considering the diverse cases described above, we identify three distinct moments within an intervention – a prelude in which an actor assesses her situation and determines that some action is required; the intervention itself in which an action is performed; and finally, some consequences of that action. By considering how this sequence unfolds across the examples presented in this essay, we can tease out some of the characteristics that distinguish an interventionist attitude towards infrastructure from what we might consider a "normal" or "everyday" understanding of use. In posing material consciousness to describe an orientation towards infrastructure, we challenge the conception of citizens as mere consumers of services, separate from specialist planners and engineers who are responsible for infrastructure creation and maintenance. We build upon well-established tradition in Science and Technology Studies (STS) and related disciplines, where scholars have challenged separations between experts and amateurs in medicine (Epstein 1996) and the environmental sciences (Coburn 2005). By focusing on diverse actors, we also show how engagements with infrastructure are not limited to moments of catastrophic failure.

As practitioners, we care a great deal about the role of the overlooked designers who contribute to different infrastructures and engage in their own form reflective practice (Schön 1983). Von Hippel (2005) has studied end-user innovation for several decades and has identified diverse domains such as semi-conductors, open-source software, innovation toolkits that allow end-users to customize commercial software, industrial products, kite-surfing, hiking goods and more industrial fields such as semiconductors where users have contributed significantly to an industry's reshaping. We are also interested in innovative and pro-active users. For example, generations of backyard and guerilla skate ramps have informed the design of officially sanctioned skate parks now offered by many cities. Smart meters and other energy saving devices are inspired by decades of do-it-yourself energy conservation and harvesting projects. Activist communications networks have also inspired equivalent commercial products. So even though infrastructure might differ vastly from consumer products, an interventionist stance in users feeds back essential lessons to public and private infrastructure developers.

Prelude: imag(in)ing the city

The interventions described in this essay are predicated on a view of the city that re-orders familiar objects according to a particular set of needs and desires. For the graffiti artist, a wall becomes a canvas; for the squatter, a streetlight becomes a power supply. The practitioners described thus far all assume an outsider's posture, viewing the city as if for the first time to construct an 'image of the city' (Lynch 1960) that deviates from the norm. Following Heidegger, we observe that their gaze constructs an alternative catalog of the 'ready-to-hand' (Heidegger 1978); the physical and visual characteristics of the urban environment important to them differ from the types of features typical residents notice. For example, they might care about the location of resources such as spray-paint, geographies of surveillance, presence of police, general activity levels, and other characteristics of a location. In the process of surfacing the image of their city, artists, DIY enthusiasts and activists repurpose infrastructural elements to make their presence in the social and material landscape of the city more apparent. As a result, these practitioners establish a strong sense of ownership over certain spaces even if it is temporally bounded. They engage directly with the material configurations presented to them by the official infrastructure-building entities like city government. Expressiveness here is not a metaphor borrowed from language, but a practice intertwined with a new recognition of the material properties of the city.

These tactical interventions are in stark contrast to the work of the traditional custodians of urban change such as politicians, urban planners, developers and many others who operate under considerable pressure from many stakeholder groups. While planning has mostly overcome modernist preoccupations with rationalised separation of functions, city spaces are still organised into different zones with specific usage rules and guidelines, for example, park opening hours. For De Certeau (1984), this approach to shaping urban life is anathema because they do not capture how the 'practitioners of urban space' (De Certeau 1984, p.31, cited in Tonkiss 2005, p.138) perform and live the city. Living off the grid is a similarly political act because it implies a different organization of collective living. Intermediate steps like installing intermittent energy sources also stems from a heightened awareness of energy consumption patterns and a desire to reduce the cost and environmental impact of those patterns. In these citizens, a high degree of awareness precedes their ability to intervene in the status quo.

Action: intervening in the status quo

If material consciousness precedes intervention by orienting an actor towards the built environment, it also provides the necessary conditions that enable action to be taken. Appropriation or extension of existing infrastructure is predicated on an intimate understanding of the technical workings of those systems. This requires specialised knowledge that has traditionally been the exclusive domain of formally trained engineers and technicians. With time, however, the necessary tools and techniques seem to have a way of dispersing among the general population. Technical literacy would seem to follow a similar pattern as textual literacy. In its simplest form, literacy resembles the type of collaging activity the Situationist movement referred to as 'détournement'. The activities of graffiti-writers, skateboarders or artists intervening in public spaces could be understood as the result of their ability to visualise a different material configuration of spaces. Though they are not transforming those arrangements they are highlighting important features in the built landscape and calling attention to other viewpoints. As De Certeau writes, 'Figures are the acts of this stylistic metamorphosis of space' (De Certeau 1984, p.102). These activities are a first step towards more interventionist positions.

A strong desire to manipulate the status quo requires more tools than collaging or rearranging. While some techniques migrate outward from formal institutions, the processes in which they ultimately are adopted by grassroots actors may vary significantly from those employed in large, bureaucratic institutions. We can see this quite clearly in the work performed by radical techies. Engineering activities conducted in academic and commercial contexts are often long-term affairs, subject to months or years of planning and review. In contrast, activist technology projects often support immediate, short-lived campaigns and events. They are imbued with a sense of urgency stemming partly from the passion that often motivates political action, and partly from the highly contingent environment in which activist projects occur. Activists respond opportunistically to dynamic political, legal, and technical environments. Projects are undertaken in extremely compressed timeframes, with sometimes no more than a few days or weeks between conception and realisation. The immediacy of activist projects, coupled with a perpetual lack of funding, forces a kind of rough-and-tumble innovation. Activist designers adopt highly fluid processes. They learn to quickly identify and exploit short-lived opportunities. Tactics and technologies are often developed in tandem: plans evolve to embrace new technical capabilities while changing campaign objectives in the midst of a project provoke new design directions. Compressed timeframes, imperfect information, and limited resources are not limited to activists contexts; we find them at

play in all of the examples discussed in this paper. These factors can place more constraints on system development than in other design contexts, and often lead to early deployments and adjustments on the fly after or during the usage of the system. The intense design processes employed in appropriating and extending infrastructure - and the motivations behind them - can lead to surprising innovations. How these innovations are folded into everyday infrastructure depends on each specific context and may not always capture the original meaning behind an intervention, it becomes something new. Skate parks, for example, may present an accommodation or capitulation to grassroots appropriation of urban infrastructure, but it removes the agency of those 'designers' who first recognised the hidden affordances of specific park benches or curb stones. Similarly, activists may frown upon corporate copies of systems that emerged from their innovative strategy to respond to a socio-political problem.

Consequences: visibility and changing landscapes

Infrastructural interventions alter the physical landscape as they seed shifts in material consciousness. Large-scale transformations in the provision of a resource like water both change the physical constitution of the city and can cause people to become aware of the resource and the associated infrastructure used to distribute it. The impact on the visual landscape of the city makes the practices of artists, skateboarders and graffiti writers available to other citizens. The visible interventions are just the physical traces of particular engagements with the city. The traces these practitioners leave behind impact the collective image of the city and people's perception of infrastructure. Graffiti provide new, albeit temporary landmarks for urban citizens to incorporate into their images of the city. Scratches on urban furniture left by a skateboard rail slide are lasting evidence of creative misuse. These markings call attention to otherwise mundane aspects of the urban landscape while simultaneously suggesting alternative uses for everyday things; in so doing one might suggest that they raise collective material consciousness.

In the same way, DIY energy harvesting projects and activist communications networks highlight the contingent nature of urban infrastructure. They demonstrate that the physical systems upon which we rely to deliver the basic materials of urban existence in fact represent but one of a multitude of ways that services may be provisioned, and suggest alternative arrangements of people and machines that might better address concerns that extend beyond efficient delivery of power or information - concerns like sustainability and social justice. Highlighting contingencies and suggesting alternatives implies a choice. The practitioners described in this essay make conscious

decisions about how they wish to engage with the city, decisions with both practical and symbolic consequences. Skateboarders, for example, aren't simply concerned with transportation; graffiti artists aren't motivated purely by a need for effective communication. To skate down a busy sidewalk or throw a tag up on a wall is to claim allegiance to a particular urban subculture and to imply a critique of the mainstream. Similarly, the decision to use communications technologies designed specifically for activists, even when "better" (that is, more technically robust) commercial offerings are available is to enter an alternative discursive space separate from mainstream or official communications channels. As independent channels, activist communications systems highlight concerns that are marginalized in mainstream media outlets (Jenkins 2008). They embody critiques of corporate technology at the same time that they provide alternatives. They also mark participants as members of an activist community.

The practices described in this essay demonstrate that the ways that we use infrastructure are bound up with culture and identity. They are political acts. The artifacts they produce and the marks they leave behind can be seen as symbols in their own right taking on a sort of fragile monumentality; they are ephemeral, fleeting testaments to grassroots action and collective agency.

Conclusion

Increasingly, following the economic crisis, terrorism or environmental debates, infrastructure figures in public debates in connection with economic recovery packages. These discussions rarely emphasise the fragility and necessary maintenance infrastructure requires; nor do they highlight the possibilities for local expansion and contributions from various grassroots groups. By emphasising the bottom-up design contributions to different types of infrastructural systems, we hope to add to the growing body of literature on urban infrastructure. We highlight the processes and the outcomes that result from these engagements which we argue both arise from and contribute to material consciousness for infrastructures: a heightened awareness of and an orientation towards one's physical surroundings.

Ultimately, we see material consciousness as a source of empowerment and civic engagement, debunking the myth that infrastructure is fixed and out-of-reach enables a pro-active, interventionist stance. Highlighting contingencies and suggesting alternative uses raises issues of choice and complicity. The extraordinary practices described in this essay challenge all of us to be more conscious of our surroundings and to acknowledge that the submerged technologies upon which we rely are themselves dependant on particular social and cultural conditions. In sum, all these grassroots actors challenge us to take responsibility for the material construction of our cities.

References

- Certeau, M. de (1984) *The Practice of Everyday Life*, Berkeley: University of California Press
- Corburn, J. (2005) *Street Science: Community Knowledge and Environmental Health Justice*, Cambridge MA: MIT Press
- Dourish, P. and Bell, G. (2007) 'The Infrastructure of Experience and the Experience of Infrastructure: Meaning and Structure in Everyday Encounters with Space', *Environment and Planning B: Planning and Design*, vol. 34, pp. 414-430
- Edwards, P. N., Jackson, S. J., Bowker, G. C. and Knobel, C. P. (2007) *Understanding Infrastructure: Dynamics, Tensions, and Design*, NSF Report. <http://www.si.umich.edu/InfrastructureWorkshop/documents/UnderstandingInfrastructure2007.pdf>
- Epstein, S. (1996) *Impure Science: AIDS, Activism and the Politics of Knowledge*, Berkeley: University of California Press
- Graffiti Research Lab (GRL). <http://graffitiresearchlab.com/>
- Graham, S. and Marvin, S. (2001) *Splintering Urbanism: Networked Infrastructure, Technological Mobilities and the Urban Condition*, London: Routledge
- Graham, S. and Thrift, N. (2007) 'Out of Order: Understanding Maintenance and Repair', *Theory, Culture and Society*, no. 3
- Greenfield, A. (2006) *Everyware: The Dawning Age of Ubiquitous Computing*, Berkeley, CA: New Riders. Voices That Matter
- Gulyani, S. (2001) *Innovating with Infrastructure: The Automobile Industry in India*, New York: Palgrave
- Habraken, J. (1998,) *The Structure of the Ordinary*, Cambridge MA: MIT Press
- Heidegger, M. (1962) *Being and Time*, Oxford: Blackwell Press.
- Hess, D. J. (2009) *Localist Movements in a Global Economy: Sustainability, Justice, and Urban Development in the United States*, Cambridge MA: MIT Press
- Hippel, E. (2005) *Democratizing Innovation*, Cambridge MA: MIT Press.
- Hirsch, T. (2009) 'Learning from Activists: Lessons for Designers', *Interactions*, vol. 16, no. 3
- Hirsch, T. and Anderson K. (2010) 'Cross Currents: Water Scarcity and Sustainable CHI', *Proc CHI EA*
- Jenkins, H. (2008) 'From Rodney King to Burma: An Interview with Witness Sam Gregory (Part Two)'. <http://civic.mit.edu/blog/henry/from-rodney-king-to-burma-an-interview-with-witness-sam-gregory-part-two> [Accessed on 6 May 2009]
- Lansing, S. J. (1991) *Priests and Programmers: Technologies of Power in the Engineered Landscape of Bali*, Princeton: Princeton University Press
- Larkin, B. (2004) 'Degraded Images, Distorted Sounds: Nigerian Video and the Infrastructure of Piracy', *Public Culture*, vol. 16, issue 2., pp. 289-314
- Lynch, K. (1960) *Image of the City*, Cambridge MA: MIT Press
- Lynch, K. (1972) *What Time Is This Place?* Cambridge MA: MIT Press
- Mainwaring, S., Chang, M. F. and Anderson, K. (2004) 'Infrastructures and Their Discontents: Implications for Ubicomp', *UbiComp 2004: Ubiquitous Computing*, pp. 418-432.
- Melosi, M. V. (2000) *The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present*, Baltimore: Johns Hopkins University Press.
- McCullough, M. (2003) *On Digital Ground: Architecture, Pervasive Computing, and Environmental Knowing*, Cambridge MA: MIT Press
- Sennett, R. (2008) *The Craftsman*, Yale University Press
- Schön, D. A. (1983) *The Reflective Practitioner: How Professionals Think in Action*, New York: Basic Books
- Smail, D. L. (1999) *Imaginary Cartographies: Possession and Identity in Late Medieval Marseille*, Ithaca: Cornell University Press
- Star, S. L. (1999) 'The Ethnography of Infrastructure', *American Behavioral Scientist*, vol. 43, no. 3, pp. 377-391
- Stilgoe, J. (1998) *Outside Lies Magic: Regaining History and Awareness in Everyday Places*, New York: Walker and Co
- Tonkiss, F. (2005) *Space, the City and Social Theory: Social Relations and Urban Forms*, Cambridge UK: Polity Press
- Troika. <http://troika.uk.com/about>
- Yellow Arrow. <http://yellowarrow.net/v3/>

Endnotes

¹ *Home Power: The Hands-On Journal of Home-Made Power* is a popular source of information for these enthusiasts. <http://www.homepower.com/home/> See also Mainwaring et al. (2004).²

² Fairley, P. (2008) 'A Power Grid Smartens Up: Communications technologies will make Boulder's grid more efficient and environmentally friendly', *Technology Review* March 20, 2008. <http://www.technologyreview.com/Energy/20442/>

³ For more information on the electricity grid, smart grids and smart electrical devices see Cardell, J. B. <http://www.science.smith.edu/~jcardell/>

⁴ A recent case in California demonstrates the possible difficulties. When a utility company instituted Smart grid technologies they did not gather user input which led to resistance from customers who were eventually forced to place smart meters in their homes.

⁵ Vienna, Austria, Helicopter Street-paintings, for a video of the street paintings see: <http://global-security-alliance.com/>

8. Sensor Narratives

Orkan Telhan

As sensing and recording information about the urban environment is becoming a ubiquitous practice, we are witnessing an emerging era of representations and information models that form the basis of a new urbanism that interrogates the everyday. Real-time noise, air, water pollution, energy consumption, and activity visualisations - produced by individuals, institutions, or governments - increasingly contribute to the production of common knowledge. This knowledge presents new kinds and levels of awareness about the inner workings of cities. For a generation of 'data-voyeurs' like us, different cities emerge, implicitly or explicitly, from different datasets and form the basis of new narratives of the city. Like all narratives, these representations introduce their own social, political, and technical agenda. They not only provide alternative views to inform the experience of the lived environment, but also become tools that allow their producers to construct arguments that can directly shape public opinion. Today, for instance, it is possible to capture sulfur dioxide levels in different neighbourhoods of Ankara, Turkey in real-time with mobile sensors and overlay them on a map that shows the bootleg coal distribution. The city officials who manage the process of mapping have invested money in underdeveloped neighbourhoods to gather the data. This creates speculation about the political intentions behind investing in underdeveloped neighbourhoods, and hints that the motivation is to earn more votes in the upcoming election.

In this paper, I elaborate on the kinds of politics that emerge from data-driven representation practices. Tying it closely to the scopic regimes of our times, I investigate the culture and experience of 'data-voyeurism' that is shaped by this emerging genre of 'sensor narratives.' Being both a designer and user of such systems, I present the implications of sensing, recording, and representation systems and discuss the way they establish new norms and values about cities. From cities that can use sensors to enable data-facilitated segregation, to citizen-science and grassroots knowledge that can help inhabitants fight against governmental politics, I address a variety of scenarios in which data, and its real-time and archival representations, can transform the way we construct our sensor narratives and shape our experiences of the

cities of today and the near future. Within the broader context of the *Writing Cities* project, this paper intends to locate a fictitious form - a new genre of writing - both as a new way of studying what sensing means for creating alternative experiences of the city, and also to identify what is really at stake in these new forms of representation. I explore what kinds of cities emerge through these representations, and how these in turn are represented in various political agendas.

The politics of sensing the city

Before the eyes of the data-voyeur, the city does not always unfold in the same, expected way.

The sensor's narrative

Imagine waking up one morning to a cloudy, grey, thick sky. You open your windows to see the murky air, which seems even more polluted than yesterday. Remembering the website where your city provides real-time data from city-wide air quality monitoring stations, your immediate response is to go online and check if there is anything unusual. *Nope, everything seems alright.* While you are not exactly sure what the numbers exactly mean, all technical information is summarized into a status message that assures you that everything is 'normal.'

While not entirely convinced, you decide to forget about the issue. After all, it is 8:00 AM - rush hour. If you can afford to spend an extra hour at home, things may get better. You decide to watch the morning news instead. Strangely enough, you stumble upon the one channel that has some news about the air pollution today. Apparently, it looks like you are not the only one who is concerned about the air. There is a live interview with city officials in front of one of the large public displays which reports real-time pollution values from one of the densest parts of downtown. The official simply assures that air quality is normal as he confirms the numbers you have already seen on the website. There is nothing to worry about. There is no mention of closing schools for the day in order to reduce congestion from student transportation,

or more importantly, to protect students from the current conditions.

The weather looks much darker and thicker on TV and the reporter does not seem very convinced about the official's explanations. However, it seems like the numbers on the display lose their importance before the presence of an 'official' person who is in charge of interpreting them. The topic of the conversation now focuses on the sensors. To everyone's surprise, the official admits that the information on the displays is not communicating the real information. A pump on the particle reading unit is found to be broken that day; the technicians have been called for maintenance, and the new pump is already ordered by the company that is in charge of servicing the station. The official is calm: 'Like all machines, these sensors also break every once in a while, but they get replaced under the service agreement with the company.'

Relieved by the discovery that you are not the only one who thinks that there is a problem with the current air, you learn even more astonishing details as the conversation switches to the process of 'publishing' the air pollution data from the web site. It is reported that the measurement stations are designed to publish 'raw' sensor data as it gets collected in real-time. The published data gets 'verified' by laboratory technicians who compare it to previous readings. It eventually gets registered as 'official' information and archived for future records. After the explanation, you start to believe that all parts of the process - from collection, and verification to publishing - are pretty vulnerable to the tempering of interested parties.

The reporter asks the official what he thinks about today's data which was also interpreted by a group of third party experts - engineers and academicians - who expressed different opinions based on the same readings. You implicitly sense that there is a tone of disagreement in her voice. To your surprise, the city official blames their own data. He claims that as the sensors immediately publish the data to the website, there is not enough time for the 'official review,' which would check their reliability by comparing

the data to the previous day's data. The third party experts simply analyzed 'unverified,' erroneous data which is produced by the broken sensors. And besides the mayhem created by the miscalculated data, everything is under control and the quality of the air is within the expected 'thresholds.'

This story is neither a sketch nor a made-up narrative. It is based on a variety of media coverage from the 18th and 19th of December 2008, when the air pollution in Ankara reportedly reached fatal values and therefore attracted media attention (NTV-MSNBC, 2008 - Haberset, 2008). A careful reading of the story exposes many subtleties about the nature of urban sensing practices and perhaps sheds more light on the process that transforms the sensory practice into the form of urban narratives. What immediately may strike you is the inherent 'unreliability' in such systems. Given the complexity of the process, which is discussed later, sensing systems are unreliable. They can always produce errors or completely break down and produce no information whatsoever. While you observe readings updated in real-time, the values can still be from past readings, erroneous, or simply manipulated to communicate the desired message. As spectators or consumers of data, if one becomes accustomed to a 'working' system - and subscribes a sense of trust to the system - it often becomes quite difficult to evaluate if the quantified results support what one is experiencing at the very moment.

But in this case, what lies at the core of this can be much deeper. There are a series of design decisions that allow the system to be used against itself. What is potentially at stake here is not simply a wish for more reliability, but a desire for 'manipulability.' The real-time data recorded by the stations does not translate to the data that is officially registered by the institutions. In the city official's words, the data that goes into the records is first analyzed, processed, and verified by the laboratory technicians. The 'official' air measurements in Ankara on December 18th, 2008 are not what the sensing devices read, but what the officials write for us. Perhaps a new narrative already unfolds before your eyes: a graphical movie based on a series of montages from the visualisations of different datasets juxtaposing the official view

and the 'sensory views.' On one side, you see the numerical representation of the air quality you have been experiencing, and on the other side, the numbers that have been officially presented to you - showing how nicely they stay under the thresholds approved by the World Health Organisation's safety legislations. You will still not breathe well, but at least the numbers will make you feel better.

Before elaborating on the sensory image and the politics of its representation, it is worth taking a deeper look at the inner workings of this air quality measurement system and observe the machinery that produces such narratives.

The sensor and its data

The reliability of air-quality measurements is technically conditioned by a number of factors. First, sensors work with chemical processes such as measuring the amount of gas in the air. The sensors have limited lives - six months to one year - depending on usage. Such sensors require regular maintenance and need periodic replacements. Second, sensing systems need systematic calibrations to minimise the deviations in their readings. Otherwise, imprecision during the different stages of the signal-to-data conversion process accumulates over time and yields errors. The accuracy of the dataset further depends on how often the data has been sampled and at what precision. Thus, the techniques that are used for building collections of data, their formatting, and archival techniques play important roles.

The reliability of the measurements and the perception of their results are also 'conceptually' conditioned by certain factors. For example, the reference points - institutional air quality indices -

are compared to social, cultural, and political assumptions and environmental factors. These references strongly influence if a sensor reading should be interpreted as 'normal' or 'fatal.' Also, if the source of the information is a student-run media art project versus an institution-driven one, regardless of any systematic evaluation, one can easily become biased towards the institutional method. While the technical diligence of sensor readings can be better maintained under a regularised institutional control, as the previous example demonstrates, it never guarantees that what you see matches with what really happens in the city.

Mashups

The narrative of the sensory apparatus certainly does not begin or end in its technical means of recording and representation. Data-scapic regimes also provide 'interaction' techniques for constructing new kinds of narratives. The culture of mashups, for example, introduces a new cinematography of data by allowing users to combine seemingly unrelated datasets with others, exposing new meanings and richer interpretations. A quick mashup of religious places on Google maps, for example, allows you to plot all the churches or cathedrals in Florence. As the map gets rendered in your favorite browser, you not only see the religious hot spots for your desired spiritual or touristic intentions, but also realize what is not there, who is underrepresented in which areas, as a broader political agenda unfolds the minority before your eyes. While Google may or may not argue behind the intentionality of such combinations, Google definitely claims no responsibility for the interpretations. The same techniques can be used by user generated mashups - where the same style of thinking can serve as a tool to make explicit political statements or to build consensus.

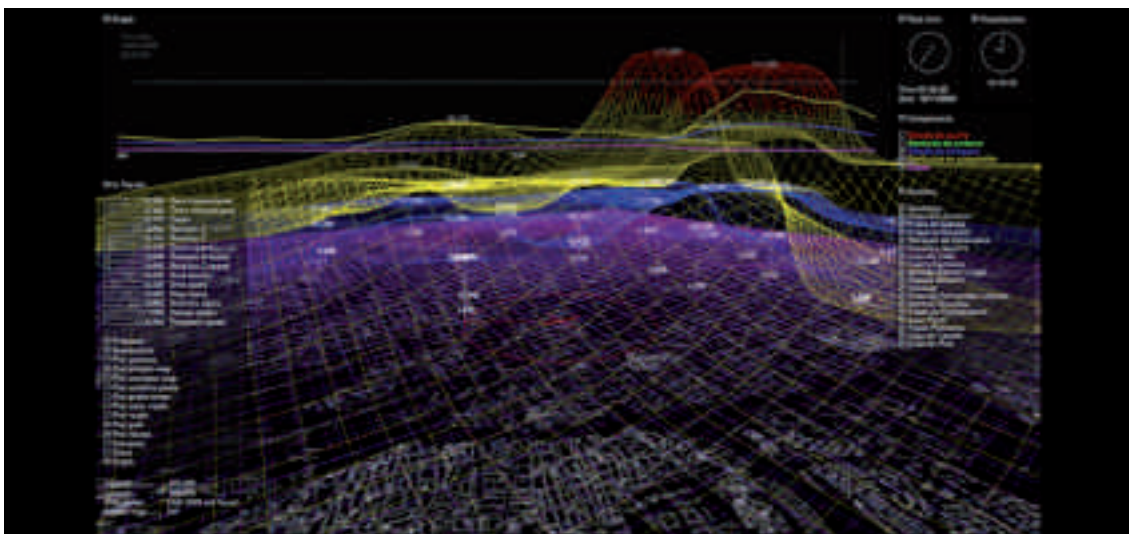


Figure 1. Screen capture from 'In the Air,' a visualisation project which aims to make visible the microscopic and invisible agents of Madrid's air (gases, particles, pollen, diseases, etc), to see how they perform, react and interact with the rest of the city. (<http://intheair.es/info/project-credits.html>)

In particular, Ankara's poor air quality during the winter of 2008 is speculated to be due to the burning of large amounts of bootleg coal within the underdeveloped neighbourhoods in the city (Tumgazeteler 2009). It is reported that the coal was 'officially' distributed by the city officials to support low-income inhabitants who could not afford the high price of natural gas or fuel-oil during the heavy winter season. As the story goes, this 'support' was interpreted as an implicit bribery before the coming elections in March 2009 where as the officials defended themselves for their good intentions, claiming that the distribution of high quality coal was due to excessive production.

Another interesting narrative emerges, this time from a visualisation of three different datasets: the coal distribution data, air quality measurements, and 2009 election results overlaid on different neighbourhoods of Ankara. As explained, sulfur dioxide, a known pollutant of air, is released when burning coal. A mashup visualisation would allow the data-voyeur to observe a politicised pollution map. When comparing the previous election results, the amount of coal distributed in different neighbourhoods of Ankara, the average sulfur dioxide readings during different times of the year, and the distribution of votes laid over the geographical map can definitely make a statement that goes beyond data analytics or other means of objective interpretation.

The story and its interpretation are constructed from a deliberate combination of three seemingly unrelated datasets that are collected by different techniques. Apart from all the issues and concerns around the production of reliable data for individual sets, the way they are represented together in time and space gives hints to a thrilling data movie that would not only stir the speculations, but also provide the basis of 'facts' that can be used for taking legal action. Being at the very thin borderline between fact, fiction, and speculation, such narratives express a city that is perhaps far more complex than what we used to know.

Grassroots sensing

There are potential caveats with using the 'official' data provided by the city's monitoring stations. As is apparent in the discussion of the first narrative (The sensor's narrative), the 'institutionalised' data has the risk of being highly manipulated to meet a specific political agenda. Moreover, taking measurements from fixed locations may not provide enough spatial resolution. Air quality monitoring stations can be spaced too sparsely or may not find places in certain locations (low-income, underdeveloped neighbourhoods) due to security concerns. The location selection criteria may also serve for different agendas that prioritise different political wills. Authorities may be more concerned with providing services to supporting voters rather than embracing scientific criteria, such as the uniform distribution of sensors based on geography and population density.

One quite popular solution, which is also utilised in Barcelona (figure 1), is to use a grassroots, participatory approach to sensing, collecting, and presenting data by a volunteer network. This organisation places remote sensors around the city, maintains and monitors them to provide an alternative view to what is published as 'official' data. This approach has its own challenges - logistics and technical reliability - but it would highlight the importance of democratising the sources of information to provide room for developing alternative arguments. If a new grass-roots narrative about the air pollution in Ankara serves as a counter-view against the official agenda, it can be designed to 'prove its point' with scientific evidence and factual information. The counter-view would not only expose the possibility of a government-funded air pollution hidden behind tempered sensor data, but also highlight the importance of debate, argumentation, and disagreement in establishing facts and truths about the city.

However, regardless of whose information is right or wrong, accurate or approximate, for better or worse, it is inherently important to accept the subjectivity that is built into the system, which is inevitably manipulated with different representation techniques. In this respect, it is quite important to be aware of the blind optimism towards the scientific use of technology and a submission towards its misleading objectivity, which could inherently dismiss the subtle politics behind representation, regardless of whose story has been told through sensor narratives.

The city and its images

The experience of the city constructed by the visual narratives relies on a rich history of representation techniques, their underlying political agenda, and the visual zeitgeist that defines the way we read them.

Scopic regimes of the city

Like all imagery, the image of the city is a negotiation between the technique of representation and the cultural meaning of that technique, which shapes the interpretation of the image within values and norms of a given time period. The French film theorist Christian Metz uses the term 'scopic regime' to address the process that constructs the image aesthetically, socially, and politically, namely in a broader cultural discourse in relation to its technical means of production, such as painting, photography, film, and now, more recently, computation (Jay 1988 pp. 3). As the scopic regimes of a given era shape the way we respond to visual representation, the concepts of the city became inherently coupled to a 'mode of seeing' and a 'structure of visibility' that configures the city before us (Donald 1995).

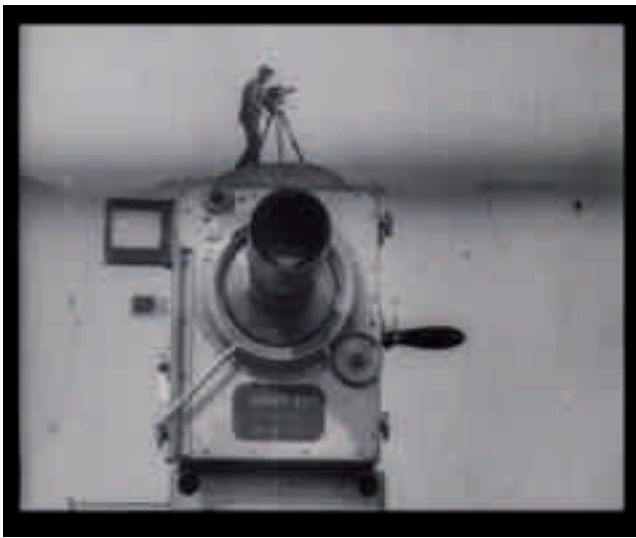


Figure 2. Frames from 'The Man with the Movie Camera' (Chelovek's kinoapparatom). (http://en.wikipedia.org/wiki/Man_with_a_Movie_Camera)

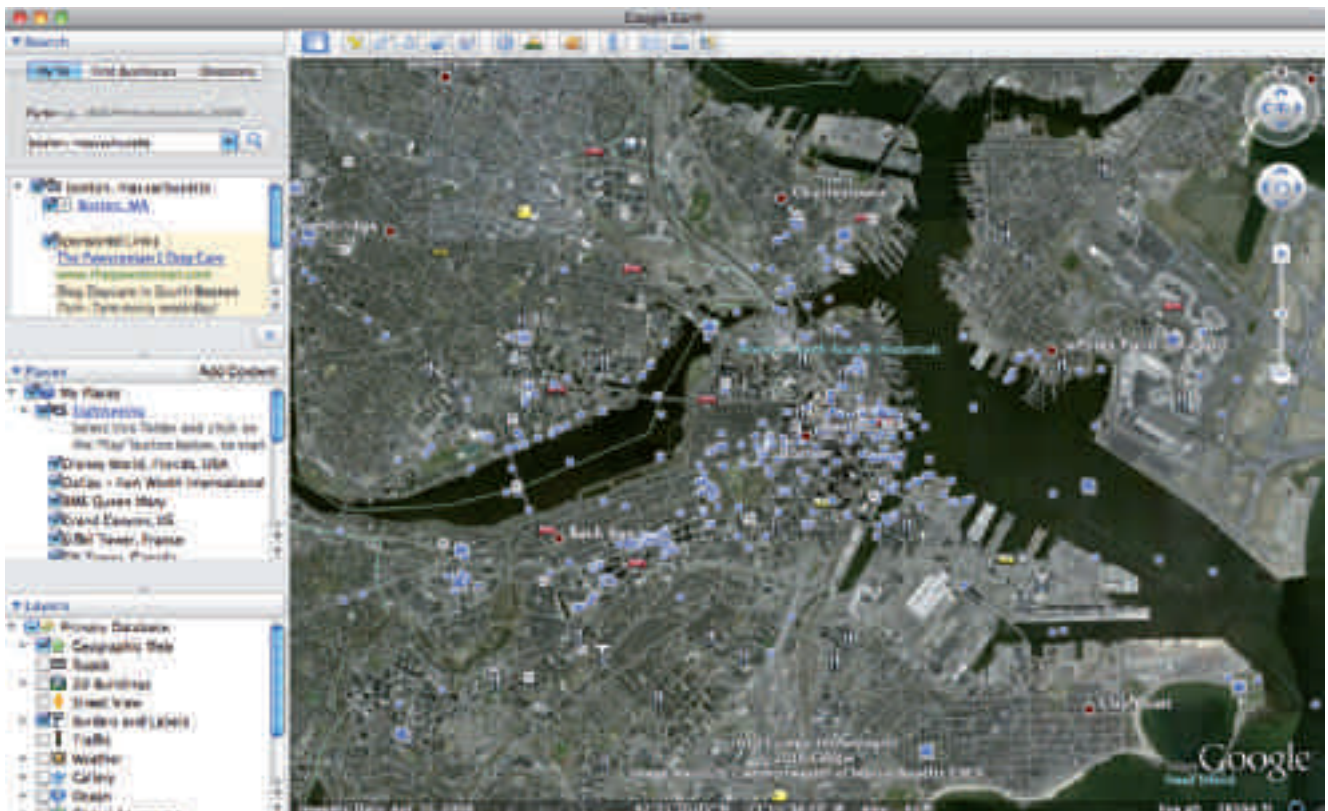


Figure 4. Google Earth Interface. (<http://earth.google.com/>)

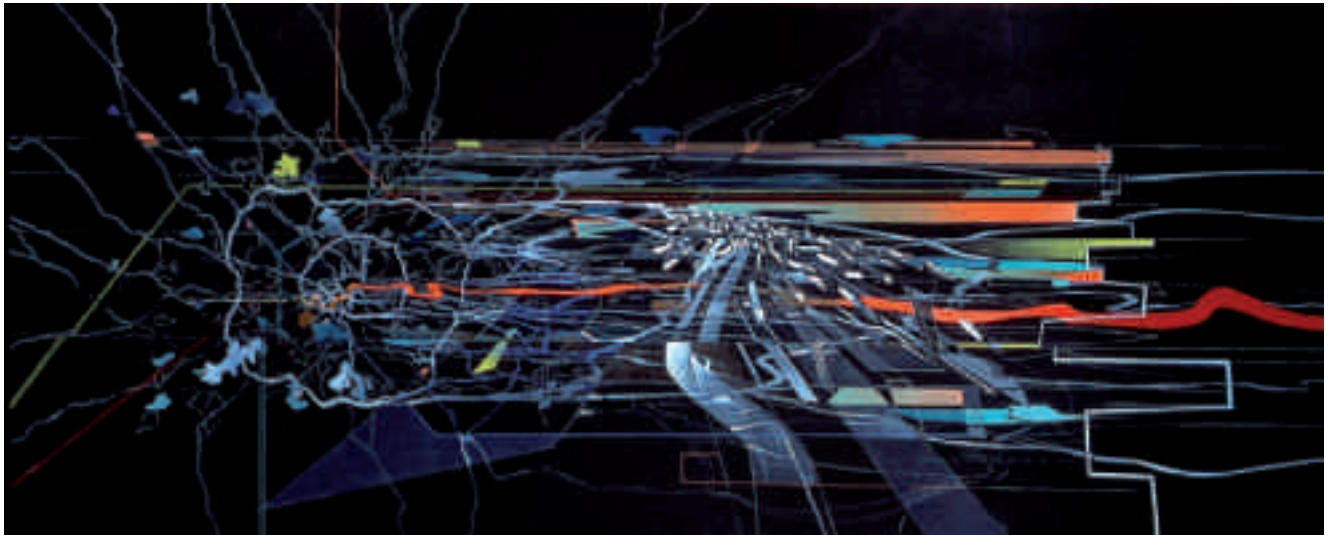


Figure 3. Zaha's Hadid vision of London 2066. (Courtesy of Zaha Hadid Architects)

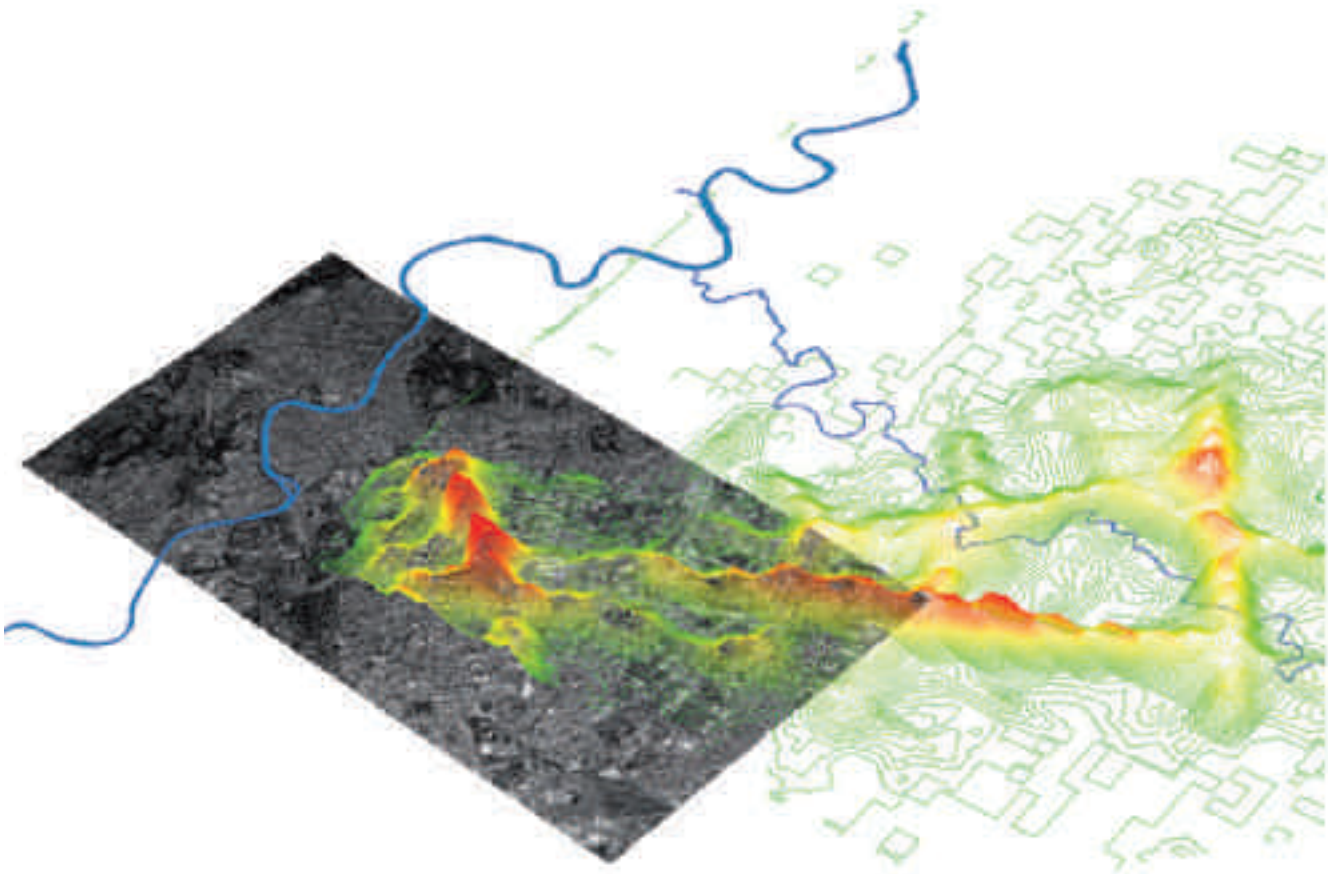


Figure 5. Real-Time Rome combines different datasets in a single interface: real-time data, GIS data and raster images. (Copyright The Senseable City Laboratory, MIT)

The Man with the Movie Camera, which documents the urban landscape of Odessa is both the eye of the director, Vertov, and his cinematographic technique, which is expressed through double exposures, jump cuts, freezes and split screens that renders the dawn of modernism at work and play in the 1920s Soviet Union (figure 2).

Likewise, the images of *London in 2066* painted by Zaha Hadid for *Vogue* magazine illustrate a graphical metamorphosis of the city, where the medium becomes Hadid's brush, disintegrating the urban form into her pure style as of 1991 (figure 3).

Data-scopio city

Today, with computational image making, we witness a different cinematography shaped by the data-scopio regimes of representation. The internal dynamics of cities, their relationship with the environment, and the activities of their inhabitants are increasingly quantified, visualised, and archived as datasets. While computational techniques that treat data may not immediately expose their creator's agenda, the visuals are still a production of style and technique. The procedures that sense, analyse, and represent data implicitly influence the way we will interpret them. Google's Earth, produced by today's data-scopio regimes of representation, offers a stylish, recreational view of the same planet. The cinematography of time and space looks familiar, but this time, the lens of a virtual camera finds its way in a world of computer graphics wrapped with flattened views of satellite imagery (figure 4).

The real-time phone activity maps of Rome not only speak the *zeitgeist* language of data visualisation "Processing," but also construct an alternative representation of the city through the dynamics of its users, as layers of data move in time and space and inhabit an abstract geometry (Reas 2007) (figure 5).

The urban document

As certain familiarity with representation technique prevails within visual culture, it tends to become easier to see beyond its analytics and experience further than what has been inscribed by a technocratic agenda. The first image produced by a photochemical process, Niépce's *View from the Window at Le Gras*, also happens to be the first 'successful' photo-realistic depiction of a city (Wikipedia 2009). However, what the view from the window at Le Gras negotiates with the history of representation and discourse of visual culture today is already beyond what is technically 'viewed' and how that image was constructed in the 1820s.

A long time has passed from the scientific-minded Niépce's technical experiments to today's digital camera culture which almost de-sensitised us from the technical agenda concerned

with the production of the image. The photographic image of the city has gone through many levels of technical innovation, but more importantly, has been a subject of many years of cultural interrogation. The photographic view of the city is not a technical imprint - an interplay between the light and chemistry on the sensitive surface - but also a cultural product that is aesthetically, socially, and culturally framed within its urban context. However, when the image of the city is compiled from a set of data points that consist of carbon monoxide levels associated with a given longitude and latitude within the city, the cinematographic play behind the image does not strike us immediately as it would in the 'traditional' image. The view of the sensed city is still regarded merely as a technical recording that 'documents' the city, while its interpretations are often stripped from the narrative agendas that shape it from its technical inception to its interpretation. The process of translating the raw material of the city into representation is similar between the optics of the camera lens and a chemical sensor, such as the sensor that is used for measuring the sulfur dioxide levels formed by burning coal, but the representation techniques widely differ in the way they create the image out of the recorded reality.

The camera imprints its visual field onto celluloid. On the other hand, a sulfur dioxide sensor yields an abstract representation - a number - that starts as a chemical process, turns into a voltage value, and ultimately becomes a numerical representation that can then be mapped onto any visual form by computational means. Like the way Niépce's image or Vertov's film manipulates perception with stylistic maneuver in the realm of photorealistic imagery, the sensory data utilises different layers of abstraction, manipulation, and interpretation and maps the sensed phenomena to an arbitrary representation that is otherwise unobservable to its human spectator. The different kinds of styles of thinking behind the selection of the sensing apparatus: its configuration, calibration, usage, the sampling of the data, the frequency of sampling, the techniques for storing the data, its formatting, processing, analysis, and finally its presentation to the user are complex processes that are still evaluated primarily based on their technical merit and not for their cultural consequences.

Today, the sensory recording of the urban landscape is still left to be studied by 'visual analytics,' (Therón 2008) and has not found its place in the genre of urban narratives that will make their way to film departments' regular screening events. However, what is visible, what is forgotten, what is accentuated, what is omitted, what is suspended, what is underrepresented, who is shown and with whom in urban datasets will certainly find its way into urban-noirs, data-thrillers, new waves, comedies, or "mockumentaries", as sensor narratives form new genres for understanding tomorrow's 'sensory urbanism' (Lucas 2008).

Data literacy

Nowadays, temperature, air, water and noise pollution, traffic, congestion, public transportation, and many other environmental and urban phenomena are sensed, recorded, visualised, and provided as services for inhabitants of cities. This increasingly data-driven urban culture not only brings a new kind of awareness and culture of interaction with the city, but also calls for a different level of sensitivity and responsibility towards the way this sensory information is produced, processed, and presented. However, this is not a call to extend our graph reading skills to penetrate into the complexity of urban systems and to comprehend their dynamic nature. This is a call to develop a different kind of literacy towards the thinking process behind the new technologies of representation as they narrate the everyday life of cities through maps, information mashups, simulations, and real-time interactive visualisations.

Sensor scenarios of the future

As this emerging genre finds a place within the visual culture, the archival and real-time usage of sensor data fuels our imaginations with even more futuristic scenarios.

Real-time segregation

As real-time sensory data becomes immediately available to one's favorite handheld or mobile device, the perception of the city also gets updated in real-time - informing where one should or should not be at a given moment. If the particle counts in the air in a given location exceed 'safety' limits, people traveling with young kids or those with asthma can be warned in real-time and advised to change their paths or to avoid certain areas of the city. As travel choices within the city gets informed not only by traffic congestion, but also pollution, cell phone activity, energy usage and many other factors, it is not hard to imagine a real-time segregation of the urban landscape, and the implicit or explicit regulation of its accessibility. As the inhabitants of the city increasingly allow themselves to be informed about their potential experiences of the city, they will need to remember the ways information gets narrated through underlying social and political agendas.

Data narratives

The archival of 'past real-time data' will also find its niche market not only among institutions, but also among young experimental movie makers. Imagine a narrative of Heiligendamm - the city that hosted the G8 summit in Germany during the summer of 2007. Overlaid on top of the footage of demonstrations is a plot of gas distributions in the air. What were these people breathing? Did the police use pepper gas against the protestors? Is there a hint of gunpowder use? This narrative could be presented as

a 'documentary' that not only captures the richer spirit of the protests, but also contributes to grass-roots data inspections that exposes signs of excessive use of power when exercised by armed forces. As the culture of sensing cities increasingly prevails to our visual imagination, the representation of events, their meaning and relation to the city will also change over time. As the everyday lives of cities get captured, recorded and archived over time, looking back at the history of urban life - through the lens of data - will probably reveal many stories that went unnoticed in their own times.

Event signatures

Either for witnessing the moments of protests or inspecting details of criminal events, the availability of data from the past will not only allow us to understand more about what was not known at a given time, but also fuel our imagination for new kinds of data-driven fictions. These would be new kinds of narratives which will speculate what could have happened if data were available to us back then. Looking back at a combination of energy consumption, noise and cell phone activity in one neighborhood, perhaps one could have identified the 'unusual' activity around the museum, hinting perhaps to the planning of the infamous art robbery of the twentieth century which shocked not only Paris, but the entire art world the following morning. Could the event have been prevented if the police had had enough data? As data fictions fuel imagination, there will certainly be more incentives to study conditions that can be cross-correlated to locate similarities in data recorded from similar incidents. As events get classified with their unique data signatures, it would also be much easier for authorities to justify preemptive actions (for example, raiding suspects' homes) once similar data patterns are observed under relative circumstances.

Conclusion

In this paper, I have addressed the emergent culture of sensor-driven urban practices and have reflected on their social, cultural, artistic, and political agendas to discuss what lies beyond the measurement itself. By looking at the impact of real-time sensing - for noise, air and water pollution, energy consumption and activity, produced either by individuals, institutions or governments - I intend to bring attention to the process that turns sensor datasets into an emerging genre of sensor narratives that express a particular view of their creators. Christian Metz's notion of 'scopic regimes' is used to explain the processes that allow us to understand the urban representations technique in a broader visual discourse (Jay 1988, pp. 3). This allows us to consider both the technique itself and the social, cultural, and artistic interpretations of the technique in relation to each other. Thus, the design of the sensory apparatus, the production of the data,

its interpretation and visualisation identify similar responsibilities in the making of a narrative. The narrative not only exposes the creator's will, but calls for further interpretations of its meaning beyond the immediate - seemingly objective or factual - information that claims to document the everyday of cities.

In relation to the history of urban representation techniques, the paper brings to attention the cinematography of data-driven image making practices that are shaped by today's computational representation technologies and the emerging data-scopic visual regimes of our times. As spectators of data narratives, we turn into data-voyeurs who continuously seek for additional pleasure from quantified and visualised interpretations of the environment. As the production of datasets establishes the urban visual *zeitgeist* and brings new levels of awareness to cities, the paper calls for a data literacy to seek further how this information is produced, processed and presented to us. Who provides this information for whom and at what cost? How does it get manipulated, and for what purpose? As datasets often do not reveal either what is accentuated or what is omitted from their agenda, the potential for further genres such as urban-noirs, data-thrillers, data-mangas, comedies, or mockumentaries, are expected to happen as sensor narratives gain more interrogative responsibilities within the popular visual discourse.

Within the broader context of the *Writing Cities* project, such new forms of writing also suggest new ways to study the politics behind re-presenting the city. For example, by providing examples from recent events that took place in Ankara, the paper demonstrates the kind of politics that emerge from sensory practices used for manipulating public opinion and for building consensus. Extended by three more possible scenarios for the immediate future, the political dimension is explored further in situations such as the real-time information based urban segregation and the potential use of the technology for justifying preemptive actions based on relative patterns.

As spectators of such narratives, it becomes important for us to acknowledge the potential uses or limits of the technical imperative, as it offers a wide range of affordances, from serving implicit regulatory practices to improving the awareness towards the urban landscape. However, it is even more important to see sensor narratives as new forms of cultural expression that will find much creative use as we gain experience in using them, and communicate alternative experiences of the lived environments.

Epilogue

Imagine, once again, waking up one morning to a cloudy, grey, thick sky. Before opening your window to the poor air, you think that it is better to take a glance at your phone - it is steadily blinking orange. Air pollution must be beyond the safety limits. Remembering that the phone company's service is based on the municipalities' official data feed, it is worth going online and checking the information with an alternative source. Your favorite daily video broadcasting site is already streaming 'narratives' from all over the city in real-time. You watch a couple of broadcasts tagged 'Ankara 7:58,' 'Ankara 8:02,' showing little kids getting on and off the school buses while mothers are covering their faces with white masks. The city looks much darker in high-definition video. In split screen, you see a map of sulfur dioxide plots, a bunch of unfamiliar gas concentration levels from today and estimates for the entire week. Red banners underneath the data maps show you the probability of how much skin, hair and lung damage your body will go through in a fifteen-minute walk exposed to the current air. Some parts of the city are already covered fully in red. It is probably time to cancel appointments as it is likely that those who are watching the same streams will not make it downtown today. A voice-over commentary suggests that it is an unlucky day for outdoor advertisers; they should either relocate or ask for refunds by dialing one of the numbers indicated below. Some videos suggest the safest roads in the city for asthma patients along with a list of numbers for emergencies, cab companies, and the complaint lines of the municipality.

A final detail catches your attention and leaves you with a smile. There is a link to the official educational council form requesting a cancellation of schools for the day. It is perhaps time to wonder how many students have already learned to work with these data streams and have mastered the art of 'data-mixing.' These days it is not that difficult to download software and tap into the data narrative culture with a live mix of sensor streams. After all, you personally know how eager one can be to have an 'official' day off of school.

References

Jay, M. (1988) 'Scopic Regimes of Modernity', in Hal Foster, ed. *Vision and Visuality*, Seattle: Bay Press, pp. 3-23

Donald, J. (1995) 'The City, the Cinema: Modern Spaces', in C. Jenks, ed. *Visual Culture*, London: Routledge, pp. 77-95

Haberset. (2008) *Ankara'da ölüm sınırı aşıldı* (Trans: Fatal point in Ankara). <http://www.haberset.com/default.asp?page=haber&id=49261> [Accessed 19 December 2008]

Wikipedia. (2009) *History of Photography*. <http://www.hrc.utexas.edu/exhibitions/permanent/wfp/> [Accessed 1 May 2009]

Lucas, R., Mair, G. and Ombretta, R. (2008) *Sensory Urbanism Abstract Book*. http://web.mac.com/raymond.p.lucas/SensoryUrbanism/Programme_files/abstract%20book%20final.pdf [Accessed 5 May 2009]

NTV-MSNBC. (2008) *Ankara'nın hava kirliliği ölçümü hatalı çıktı* (Trans. Mistake in Ankara's Air Pollution Measurement). <http://arsiv.ntvmsnbc.com/news/469820.asp> [Accessed 22 December 2008]

Reas, C. and Fry, B. (2007) *Processing: A Programming Handbook for Visual Designers and Artists*, Massachusetts: MIT Press

Therón, R. and Ranon, R. (2008) *A Visual Analytics Approach for the Understanding of Urban Datasets*, (Visualizar'o8: Database City Seminar Publication). <http://medialab-prado.es/mmedia/1682> [Accessed: 5 May 2009]

Tumgazeteler. *Kirli hava geri döndü* (Trans. Bad Air is Back). <http://www.tumgazeteler.com/?a=4403142> [Accessed 5 Jan 2009]

9. The Internet and the City: Blogging and Urban Transformation on New York's Lower East Side

Lara Belkind

This chapter relates the recent rise of weblogs and examines their relationship to processes of urban transition. Specifically, it looks at the history of Curbed.com, a weblog created in the Lower East Side neighbourhood of Manhattan that presents a layman's perspective on real estate development and neighbourhood change. Curbed began in 2001 as the personal blog of a local resident documenting the gentrification taking hold on the blocks surrounding his walk-up tenement apartment. It has since become more established, expanding to cover development in other New York neighbourhoods and spawning franchises in San Francisco and Los Angeles. This inquiry seeks to examine Curbed.com's entanglement in the neighbourhood shifts it has closely charted. This question is one aspect of larger questions about the relationship between virtual space and urban space; about the impact of growing internet use on the city. Has Curbed been a neutral observer of neighbourhood change as it professes? By raising awareness of the processes underlying urban transition, has it created any openings for community action to buffer gentrification? Or rather the opposite – have it and other neighbourhood blogs contributed to the new desirability and market value of the Lower East Side? I would argue that while Curbed has significantly enhanced local residents' ability to understand the changes taking place around them, it has simultaneously helped accelerate redevelopment by repositioning a site of local culture within a global market.

Curbed.com serves an important function in making visible the frequently invisible processes of real estate – providing opportunities for information pooling, discussion, debate, even offering potential for political activism. Yet at the same time, it has contributed to repositioning the Lower East Side in several ways. First, it has increased the rate at which development information about the neighbourhood becomes available and, by foregrounding the area's investment momentum, has unwittingly engaged in a kind of ironic boosterish. In addition, its tales of the 'hood enhance social networks among a new local demographic of young culture industry workers at the same time that these stories are compelling content for a global urban niche market. "Insider" niches taking shape in non-traditional media are highly targeted by a range of commercial interests

in today's increasingly differentiated marketplace. As a result, local physical geographies change as capital responds to global cultural niches forming in virtual space. This phenomenon can be read, for example, in the rapid transformation of the Lower East side from a residential area into a consumption zone of nightlife, entertainment and retail. Finally, Curbed and other blogs have reinforced existing neighbourhood social divisions by creating a virtual space of dialogue that technologically and culturally excludes the Lower East Side's remaining immigrant communities.

Bloggers and the neighbourhood's new population of young information economy workers also see themselves differently than did an earlier generation of artists who "frontiered" the Lower East Side's rough tenement blocks in the 1970s and '80s and ushered in a first wave of gentrification. Unlike artists who felt part of a counterculture, most bloggers do not make a claim to operate outside of middle class conventions and commercialism. In the present moment of the Lower East Side, boundaries between cultural innovation and commerce are blurred. Although bloggers are not primarily motivated by economic goals, economic value creation is seamlessly folded into their experimentation with creating new forms of culture, information, and technology.

A number of authors have addressed the impact of new telecommunications technologies upon urban development trends. Early on, both Saskia Sassen's book (1991), *The Global City*, and Stephen Graham and Simon Marvin's (1996) *Telecommunications and the City*, rejected previous theorising that such technologies erode the demand to locate in urban centers and make spatial proximity irrelevant. Their work stresses instead that telecommunications have the opposite spatial effect, actually increasing the centrality of high tech infrastructure networks and of the homes and workplaces of new economy workers. Growing demand for these homes and workplaces is focused particularly on a few select urban 'control centres' (Sassen 1991) in the global economy – such as New York City.

More recent writings on the social impact of internet technologies echo the importance of urban centrality and theorise additional social effects, for example a growing pluralism of expression and democratisation of information access. In fact, Curbed.com itself proposes that its central mission is to democratise knowledge about real estate operations in New York City – posting reader tips about new and rumoured developments and sponsoring an online dialogue. This information has long been obscured by the dominance of a highly competitive real estate industry, by hidden transactions in the speculation process, and by New York City's lack of a centralised real estate listings system. Curbed has charted the recent gentrification of the Lower East Side from a shifting perspective, often critical and ironic, at other times sympathetic, and generally claiming to be an objective observer of inevitable urban evolution.

Greater transparency in the real estate market has been the key contribution of a host of real estate dot coms, including Zillow, Trulia, PropSmart, LiveDeal, Point2 and Oodle. These are in addition to real estate information and listings available on Google, Yahoo, and Craigslist. All of these sites give consumers direct access to sales and listing information once widely dispersed and controlled by brokers and agents. To some extent, these sites have the effect on real estate that internet travel sites have had on the travel industry.

Yet the Lower East Side weblogs are distinct from real estate websites. The content on their pages is not data and listings information but rather stories of place. The dialogue that they generate in virtual space enhances a neighbourhood 'scene' that is simultaneously forming in physical space: Bloggers may interact on line but will also meet for a drink at a local bar. Their weblogs make this local scene accessible to a global audience interested in the culture of hip young urbanites. As a result, blogs bring exposure which not only "sells" the neighbourhood's terrain but also transforms the neighbourhood into a brand image that can be adopted to sell clothing, music, new restaurants, bars, hotels and entertainment.

Curbed.com

Curbed evolved from the personal blog of its publisher, Lockhart Steele, a New England prep school and Ivy League grad who moved to New York after college in 1996 to work in publishing and undertake a failed dot com venture. Steele, a freelance writer, became part of a burgeoning culture of weblogs, of which not a small number focused on daily life in New York. Steele graduated from Brown University after attending St. Paul's, the high school of John Kerry, and jokes that in Manchester, Massachusetts where he was raised, 'people care more about where you go to prep school than where you go to college' (Grand Street News 2005). While in college, he began a few book projects with friends: a fan book on the rock band Phish and a series called the *Book of Ages*, reflections upon turning 30 and 40. Afterwards, he was hired as an editor at *Wide Band*, a consumer electronics trade magazine in New York. The magazine failed, but he succeeded in convincing its publishing executive to help finance a dot com project he was developing with another friend, a database of popular web sites. When the dot com boom went bust and his site never launched, the same executive rehired him to manage a new magazine, *Hamptons Cottages and Gardens* (The Villager 2004).

In 2001, Steele rented a walk-up apartment in a tenement on Rivington Street and began a blog for his friends to read. This blog – titled: *Lockhart Steele.com Web Presence Lower East Side* – began as a site for personal musings but soon turned its lens on the neighbourhood. Initially its pages were filled with trials and tribulations of the Boston Red Sox and travels with a friend through the Himalayas, but quickly its subject became the changing physical and cultural landscape of the Lower East Side. Discussions touched upon real estate, retail and restaurants, and neighbourhood life in general.

LockhartSteele.com charted new condo and hotel development projects and solved local real estate mysteries of changing ownership and sales of vacant lots. Other topics were growing numbers of new restaurants and bars, the decline of the area's Jewish and ethnic businesses and of its local theatres and music venues. Discussions of neighbourhood street life included

documenting graffiti art. Steele also followed struggles inherent in neighbourhood change such as the “noise wars” between existing residents and new nightlife as well as more recent arrivals’ fight with Fresh Direct to add the area to its grocery delivery zone. In addition to the departure of neighbourhood institutions, Steele chronicled the new presence of celebrities such as Moby, a techno music star and activist who opened a local vegan café and adopted the neighbourhood’s working class imagery as part of his public persona. The site was a dialogue – internet readers continually e-mailed in new information and Steele’s blog entries linked to an array of other weblogs and news articles.

When a high-rise boutique hotel broke ground for construction directly across the street from Steele’s tenement apartment in 2002, this event heavily influenced the blog’s shift to real estate and gentrification. Over the next several years, Steele uncovered stories behind the project’s fits, starts, name changes and controversies over shady real estate transactions and the use of non-union labour – and posted them on his blog:

Tuesday, December 31, 2002

W Hotel... Construction continues on the 18-story behemoth across the street from my apartment on Rivington...At least I can see where I live from anywhere below 14th now...

Strangest Daily Experience, Rivington Street Edition

So here’s the deal with the new Lower East Side **W Hotel**, told to me by an insider. Apparently, Starwood (the parent company) doesn’t actually own the structure that’s going up in the heart of the LES. The plan is that, once this massive structure is complete, the developer (one ‘Downtown LLC’ by name) will go ‘bankrupt’ and Starwood will ‘just happen’ to purchase the property. As a result, the place is being built with non-union labour. Sub-result: Every morning this year, I’ve stepped outside to find (a) a group of striking labourers; and (b) their 25 foot inflatable rat looming over me...

Tuesday May 27, 2003

LA Goes LES | 04:27 PM | 10 TB

LA Times reporter **Geraldine Baum** fills the West Coast crowd in on the **Surface** [formerly **W**] **Hotel** and its



Figure 1. Construction on Rivington Street. (LockhartSteele.com)



Figure 2. \$250 a Night at the Corner of Posh and Gritty [latimes.com]

developer, Paul Stallings. Looks like everyone's keeping it real:

During a tour of the \$250-a-night rooms at the Surface, a woman in a housedress emerged from her apartment in an adjacent tenement and began hanging her laundry on the fire escape. 'That's what we want people to experience,' said Amador Pons, the 28-year-old hotel architect, first pointing to the woman sunning her laundry and then sweeping his hand across a cityscape of tenement rooftops and East River bridges.

(see figure 2)

Next, conflicts arose in the shift of the Lower East side from a residential area to a new nightlife district. Tired of the noise and late night activity accompanying the new density of bars and entertainment venues, some neighbourhood residents sought to block granting of additional liquor licenses. Schiller's Liquor Bar, a fashionable new restaurant by the owner of tony SoHo eatery, Balthazar, had a run-in with the area's community board over its license and, as the saga played out, it was documented by Lockhart Steele on his blog:

Monday, October 27, 2003

Schillers: Battle Lines Being Drawn | 09:59 AM | 13 TB
When we brunched there Saturday morn, we never imagined that **Schiller's** could be a **Liquor Bar** no more. Yet that's the rub from Community Board 3, which has requested that **Keith McNally's** boisterous boîte lose its full liquor license. Reputed crimes against the neighbourhood, according to an article in today's Times, include:

- Illegally close **proximity** to high school across street;
- Large **neon LIQUOR BAR** sign is 'annoying';
- Employees from Schiller's use hose to wash bar mats and trash cans on the sidewalk in front of the restaurant at 4am, creating 'a din';
- '**General resentment**' that new bars and restaurants in neighbourhood are turning a 'residential area' into an 'entertainment bazaar.'

Hrhm... tough to argue with those. (Clearly, some people *just don't get it.*)

Tuesday, October 28, 2003

Schillers: Day 2 | 11:22 AM | 12 TB
As of 8:42am this morning, the doors of **Schiller's** are still open, the neon is lit, school kids from across the street are inside sipping pernod, and breakfast is being served. God save the Queen!

- **Ian**: 'I for one will be wearing a Save the Martini t-shirt until this is resolved.' [ebway.org]
- **Liz**: 'The hipsters annoy me, too—tearing through town with their infernal electroclash music, and leaving in their wake a devastating trail of legwarmers, ironic t-shirts and upper-middle-class guilt. But I have to side with LES blogger Lockhart Steele on this one.' [The Kicker]

Steele had an ambivalent relationship to the gentrification he was witnessing on the Lower East Side, but generally professed to be observing an inevitable process of change:

December 31, 2002

LES Throwbacks Not To Lose

1. The **Matzo Factory**... Walk past and check out the matzo coming off the conveyor belt, and the old Jewish men packaging it up. Better than fresh donuts at Krispy Kreme (Rivington @ Suffolk/Clinton)
2. **Economy Candy**... A bona fide tourist attraction, this old school candy store sells in bulk. A must-see. (Rivington @ Ludlow/Essex)
3. The **Kosher Wine Mural** on the wall above Essex and Rivington.... Lord, don't let them replace it with a Miss Sixty billboard

Five Signs of Creeping LES Gentrification

1. **Jennifer Convertibles** opens LES store (Delancey @ Allen)
2. Age-old kosher deli landmark **Ratners** closes to expand increasingly cheesy cocktail haven **Lansky Lounge** (Delancey @ Norfolk)
3. **Moby** opens overpriced teasshop **Teany** (Rivington @ Orchard/Ludlow)
4. **Apt. buildings for I-Bankers** sprout ('Gotham Court' on Essex, that big-ass place on Bowery @ Spring)
5. This weblog

By 2004, LockhartSteele.com attracted about 2,000 hits per day on the web (The Villager 2004). This startling popularity and his own interest in the commercial potential of blogs led Steele to launch Curbed.com in May 2004. After one short-lived attempt with a restaurant and nightlife blog called 'Below 14th', Steele and a high school friend with a Harvard MBA came up with a business plan for a blog whose subject was real estate and neighbourhood change. The day of the Curbed launch, LockhartSteele.com carried the following text to explain the undertaking:

Curbed is based on the idea that all conversation in New York eventually comes back to real estate, apartments, and the neighbourhoods we inhabit...I think real estate in New York is interesting not because of the dollars and cents involved (although, yes, that can be interesting too) but rather because of what it means for the city, and... what it means for the neighbourhoods we call home.

I last got away for more than a month in the summer of 2001. It was right after I moved into my current apartment, on a relatively quiet block with an old Mexican food place and a hardware store that inexplicably closes on Sundays across the street. Since then, this block -- this tiny, one block -- has had a bar named after a French poet move in downstairs; an art gallery open a few doors down that a major newspaper immediately declared profoundly important; a hip clothing boutique for women take over an old garment store; a giant Mondrian-clad monolith rise from nothing to tower over the street; and, perhaps most fitting of all, a candy store that has been there forever become enshrined as an unparalleled tourist destination. (LockhartSteele.com May 24, 2004)

While documenting these changes in his neighbourhood, Steele had also been charting new developments in the world of weblogs. A relatively new medium, the terms 'weblog' and 'blog' were coined by 1999 to refer to online diaries first in use in 1994. Also in 1999, Blogger offered the first widely used, free blog-creation service. 2002 marked the launch of the first blog advertising broker, Blogads. The same year, Nick Denton, an acquaintance of Steele's who would later become his employer, launched the first in what would become an 'empire' of blogs based on technology, New York gossip, and other niche topics. By 2005, yearly blog ad sales were estimated at \$100 million (New York Magazine 2006, 'The Early Years'). In November, 2002, Lockhart Steele posted excerpts from an interview with Nick Denton concerning a new gossip blog project:

Wednesday, November 20, 2002

Thin Media | 01:09 PM | 12 TB
Nick Denton says he's working on something cool:

...Real estate ads will be a prime revenue source. 'The advertisers target old money in the New York Observer. We'll serve the advertisers targeting the young money,' he said. 'We're getting the formula refined for thin media.' If he could identify the right niches and locales, Nick said, 'I'd love to launch one of these a month' (Blogads 2002).

I love it. Perhaps a relationship with my employer [Hamptons Cottages and Gardens] is in the cards -- we do **high camp real estate gossip** better than anyone.

Clearly, with the surprising popularity of his personal blog – and his somewhat random yet serendipitous employment at a lifestyle and real estate magazine – Steele soon realised he had hit upon just such a 'niche and locale' – the Lower East Side and other volatile New York neighbourhoods.

Curbed was launched and expanded to cover New York City, neighbourhood by neighbourhood, and by 2005 had 200,000 unique visitors (a million page views) per month and major advertisers including the New York Times (Inman Stories; Business Week online 2005). Lockhart Steele's coverage of the Lower East Side remained very similar to that of his personal blog – with the same small details of place-specific cultural observation but with more investigation of real estate activities and their ramifications for the neighbourhood. Some of the real estate stories followed by Curbed included a local realtor's attempt to promote the neighbourhood as 'LoHo', for Lower Houston Street. Another notes Seward Park residents' creation of a 'flipping tax' to discourage profiteering after this moderate-income housing cooperative, developed by a local garment workers' union in the 1950s, was recently privatised. One piece gives a sense of the sheer scale of investment taking place within the modest urban fabric of the Lower East Side: It documents the sale of a Rivington Street walk-up tenement for \$8.5 million, 'a

gross multiple of nearly 13 times the rent roll' (Curbed.com 2006). Still others provide information about demographic shifts in the neighbourhood which might not be visually evident. For example:



Figure 3. Lismore Hosiery (LockhartSteele.com)

According to blogger Joe Schumacher, Lismore Hosiery, on Ludlow and Grand Streets, is either the **scariest or creepiest storefront** on the Lower East Side. But put aside your nightmares of spare mannequin limbs for a second, and understand that it can now be known for a second reason: the site of another new LES condo development.

At least that's according to Lower [East] Society, who drop us a line: 'This evening, I noticed the owner of Lismore Hosiery Co. (corner of Ludlow and Grand) was cleaning out the store. Asked what was happening, he said **the shop was sold and a new condominium will take its place**.' So who's got the scoop?

This reliance on a stream of input and information from readers made the site a virtual space of continuous interchange which Lockhart Steele promoted on his own site and in news articles as representing the democratisation of the real estate industry in New York.

New York City is the self-described real estate capital of the world, but even to those spending the \$1 million it takes to buy an 'average' apartment in Manhattan – or those dropping \$2 million to, you know, get that second bedroom – the rules of the game can be obscure, and good information hard to come by... Curbed aims to map the city as it changes in hopes of understanding the neighbourhoods we inhabit a little better. To do it right, we need you. Drop a line: property tales, story tips, feedback and the like are most welcome...

Curbed.com Mission Statement
 (LockhartSteele.com 2004)

Whether it's matching buyers and sellers, or providing detailed property statistics that used to be hidden from consumers, the Internet is flattening the [real estate] game – and making it more democratic....And Lockhart believes we are only at the beginning of this phenomenon – catalyzing millions of users to share information about their local community with each other.

Urban Probe Magazine (urbanprobe.com, July 2006)

Weblogs and democracy

Curbed.com's claim to be a democratising medium that can level the playing field of urban transformation is related to larger optimism about the potential of the internet as a medium for democracy and pluralism. According to Ted Friedman (2005):

Blogs embody the hopes of so many cybertopians that computers might democratise the distribution of information.... that the blogosphere might become the public sphere – not just an adjunct or echo chamber [to the mass media], but a forum where a large portion of Americans get their news and share their views.

This optimism reached a peak in 2002 and 2003 in the American political arena, first when Senate Republican leader Trent Lott was forced to resign after making comments interpreted to disdain the civil rights movement. Though his remarks were initially ignored in the mainstream press, a storm of discussion on blog sites – accompanied by research into Lott's history of segregationist political stances – finally brought the discussion into the mass media. In 2003, the success of the Howard Dean presidential campaign both in fundraising and in spreading its message through a decentralised network of independent bloggers was key to sparking the perception of the internet as a bottom-up democracy, a virtual public sphere that could reject traditional media (Friedman 2005). This is almost a vision of a neo-Habermasian public sphere, where an engaged, sustained dialogue on public issues could take place in virtual space rather than in the bourgeois coffee house.

However, some theorists believe that the 'democracy' of the internet is more descriptive of the structural quality of the medium than it is of an inherent political quality. This is a structure that from a political perspective has a number of Achilles heels: it is a structure that can be commodified, a structure that is subject to the inequality of 'power law' distributions of information, and a structure whose community is differentiated but also socially exclusive:

The bewildering variety and dynamism of cultural expression on the Internet has often been understood as an effect of a new mode of communication distributed and many-to-many rather than centralised and few-to-many [...There is a] coexistence, within the debate about the digital economy, of discourses which see it as

an oppositional movement and others which see it as a functional development to new mechanisms of extraction of value. (Terranova 2004, p. 24)

Manuel Castells believes the internet to be primarily a space of commodification. It and other developments in telecommunications and information processing comprise the 'space of flows' through which the global economy will 'penetrate all countries, all territories, all cultures, all communication flows, and all financial networks, relentlessly scanning the planet for new opportunities for profit-making' (Castells 1997, p. 21, cited in Graham and Marvin 2001). However, he also believes that the cultural values of the new network society operating in this space of flows are no longer simply that of pure capital accumulation:

The new culture of the global network society is a culture of communication for the sake of communication. It is an open-ended network of cultural meanings that can not only coexist, but also interact and modify each other on the basis of this exchange. (Castells 2004, p.40)

Castells feels this culture can be characterised by what has been called the 'hacker ethic' which has two primary cultural values: innovation and sharing:

It is a culture of innovation for the sake of innovation. The passion to create replaces capital accumulation as a means of salvation...The free sharing of knowledge and discovery is the essential mechanism by which innovation takes place in the information age. (Castells 2004, p. 40)

Castells' characterisation seems an accurate description of the culture in which Lockhart Steele and other bloggers currently operate, where lines between profit-making and democracy become blurred in their own discussions and in the mission statements of their websites.

Saskia Sassen also points out that the idea of the internet as an equalising medium is fallible, particularly in the realm of web logs:

[T]here is no necessary correspondence between openness and distributed outcomes, and equality...This fact does come through...in the winner-takes-all patterns evident today in web log accessing...[C]ivil society organisations also develop power law distributions as they scale up. It is not only in finance that the mix of openness and choice produces something akin to a winner-takes-all pattern. (Sassen 2006, Foreword to Dean, p. iii)

As both the number of blog sites and those visiting them have grown, a few sites that appeared early and receive links from other web sites tend to hold exponentially greater visibility and dominance over others as prominent voices on the internet. This power law distribution may in part explain Curbed's success, given that Lockhart Steele's blog was one of the first sites to become popular on the Lower East Side. Not all internet voices feel he

accurately speaks for the neighbourhood, and he has received criticism from other local bloggers who feel he has contributed to gentrification:

Lockhart Steele has indeed been a frequent target of mine when discussing Lower East Side development. His name alone is offensive to the immigrants who suffered through this neighbourhood's harshest times. My problem with Steele comes from his sense of entitlement. Here's a privileged kid, the product of Northeast boarding schools and an Ivy League education, who arrives to NYC and moves to an 'edgy' part of town that he insists on turning into Lower East Hampton. How he became an authority on the area is a mystery to me. (Krucoff, theotherpage.com, April 2004)

Lastly, Stephen Graham and Simon Marvin expand upon Castells' description of the way in which the internet operates to include some voices in dialogue but excludes others:

[Information] processes are directly supporting the emergence of an internationally integrated and increasingly urbanised, and yet highly fragmented, *network society* that straddles the planet. New, highly polarised urban landscapes are emerging where 'premium' infrastructure networks...selectively connect together the most favoured users and places, both within and between cities...At the same time,...infrastructures often effectively bypass less favoured and...what Castells calls 'redundant' users. (Graham and Marvin 2001, p. 15)

This produces highly layered environments such as the Lower East Side, where a less affluent ethnic population co-habits a neighbourhood with an incoming demographic of young, blog-savvy new economy workers – the 'most favoured' users described above by Graham and Marvin. The latter group participates in a dialogue about neighbourhood transformation in which much of the community, especially those being displaced, are for the most part not engaged. Lockhart Steele remarks as much on his blog:

Wednesday, December 31, 2003

Dark Side of LES Gentrification [continued]

1. Dwindling local theatre scene...
2. Misrahi Realty's plan to deep-six Ludlow Street stalwarts Barramundi and Collective Unconscious Bastards.
3. The dawning realization that there are few residents left around here who *don't* blog.

On the one hand, the Lower East Side is a 'most favoured' place in the network society. It has a high rate of internet use and one of the highest documented concentrations of bloggers in New York City. (This fact made it the location of a key New York organising event for the Howard Dean campaign) (LockhartSteele.com December 31, 2003). On the other hand, the Lower East Side

also contains a declining population disenfranchised by the new economy and by a growing 'digital divide.'

Blogs and urban change

I would argue that Curbed.com – while it successfully makes visible the often invisible workings of real estate and opens access to knowledge about development processes and urban change – in the end helps reposition working class neighbourhoods in the global marketplace. It does this through several operations: the intensification of high-speed information exchange; the production of content for niches of an increasingly differentiated market; and a de facto exclusion of the Lower East Side's remaining local ethnic community.

Information Exchange

Blogs have proven highly effective vehicles for the global economy in what Castells terms the space of flows due to their flexibility and efficiency for communication. Unlike conventional journalism, blogs can immediately incorporate new information and instantly communicate it to a global audience. Without professional obligations to fact check or seek permission, new information can be made public as soon as it is available. There are no set publishing deadlines to stagger or delay the appearance of new information. In fact, bloggers are driven by the ranking hierarchies of search engines such as Google – which prioritise sites that are regularly updated. Bloggers must continuously publish new information throughout each day to retain their visibility (New York Magazine 2006, 'Blogs to Riches'). As a result, they often have the most current information or discussion about a given subject. Blogs prioritise speed over accuracy, as they are not held to the standards of traditional journalism that require time to check facts. Even if their information is not completely accurate, they have the flexibility to update and correct as they go – and this process often becomes part of the discussion. For example, Lockhart Steele.com reported in 2003 that a vacant lot on Stanton Street had just been sold at auction by the city for \$2.2 million (dramatically higher than the initial set bid price of \$242,000). A reader wrote in to say that the accompanying photo Steele had posted was actually of another vacant lot on Stanton – and broadened the discussion of sites in flux in the neighbourhood (LockhartSteele.com July 23, 2003).

This currency of information, as well as the informal, insider tone of blogs, is appealing to both readers and advertisers. Provocative blogs such as Lockhart Steele's may be listed as links on a host of other blog sites. It may draw readers interested in checking out the neighbourhood or investing on the Lower East Side, and real estate advertisers with new properties to sell. According to Castells (2000), internet related industries as a whole have grown

exponentially, even with the dot com bust of 2001, and internet businesses such as Curbed.com which generate revenue from advertising rather than direct revenue have been a significant part of this growth.¹

The speed of information dissemination afforded by blogs about new investments and cultural trends, and the growth of internet-based business generally, also correlate to real estate value creation and hyper-gentrification – the increasing speed with which working class neighbourhoods have recently appeared to gentrify. While demographic transitions in other New York neighbourhoods, including SoHo and the East Village occurred over decades, the Lower East Side has undergone dramatic social and physical shifts in the last five years. Although these shifts began in the late 1970s and are a result of many factors – including a city-wide shortage of middle class housing, an influx of institutional capital following decades of small-scale speculation, and a decrease in drug-related crime – the pace of neighbourhood change has steadily increased and significant changes have occurred within shorter and shorter periods.

A steady fifty year decline in property values on the Lower East Side came to an end in the late 1970s, after a period of severe disinvestment. The cycle was first triggered by the federal Immigration Act of 1924, which brought the flow of European immigration and new demand for the area's tenement housing to an abrupt halt. Between 1979 and 1982, however, median sales prices per unit in the East Village and Lower East Side tripled, rising from approximately \$3,500 to \$10,000. This upward trend continued to accelerate. Properties selling for tens of thousands in the 1970s sold for hundreds of thousands in the 1980s. By the late 1990s, building sales were commonly above a million dollars. In most recent years, residential rents on the Lower East Side have frequently exceeded those of the Upper East Side, while commercial rents are higher than those on Park Avenue. Symptomatic of this condition of 'hyper gentrification' are urban shifts such as the rapid rise and decline (due to displacement) of the area's cluster of a dozen independent theatres within the space of seven years, from 1995 to 2002 (The Village Voice 2003).

Writers including Anthony Townsend and Steven Berlin Johnson link the increasing availability of digital information about neighbourhoods to urban trends such as the emergence of new retail clusters and patterns of gentrification:

Studies estimate that some 80 percent of the information on the web has a spatial component – increasingly, that geographic metadata can be recorded, indexed, searched by a widening array of tools and browsers, both mobile and fixed...[A]ccumulations of searchable, digital location-based annotation will help amplify the existing character and value of urban places.² (Townsend 2004, p. 101)

Content

It is not simply the speed with which information is exchanged, but also the content that is produced by blogs such as Curbed.com that contributes to value creation. As cities like New York have become the global centres of 'production' of services and information in the new economy – as theorised by Sassen, Castells and others – certain neighbourhoods within these cities have become associated with such production. Interestingly, the value of content production in virtual space often correlates to new geographies of value in physical space. This is true on the Lower East Side.

Castells addresses the special tensions within gentrifying working-class districts:

[T]raditional working-class neighbourhoods, increasingly populated by service workers, constitute a distinctive space, a space that, because it is the most vulnerable, becomes the battleground between the redevelopment efforts of business and the upper middle class, and the invasion attempts of countercultures...trying to reappropriate the use value of the city. Thus, they often become defensive spaces for workers who only have their home to fight for. (Castells 2000, p. 432)

But what Castells does not address is the way in which the invasion of countercultures creates value as such neighbourhoods become associated with content production in the digital economy. This initial value creation then opens such areas for redevelopment by business and the upper middle class.

On the Lower East Side, there is a particular correlation between the production of internet content and the growing value of the neighbourhood. According to nycbloggers.com, no less than 178 blogs exist in the area – clustered near the 2nd Avenue and the Delancey Street subway stations. (In Manhattan, only the East Village has a higher concentration) (nycbloggers.com). Most are of a similar genre, relating the daily lives and reflections of young urbanites as well as local culture and entertainment options. The emergence of the Lower East Side as an epicenter of internet content production seems to coincide with its emergence as one of the most active sites of gentrification in the city. One explanation for this phenomenon includes the fact that for some time, this was one of the few Manhattan neighbourhoods in which young twenty-something workers in media and culture related industries could afford to reside. Another is that, as the neighbourhood became a centre for artists, theatre, restaurants and nightlife in the 1990s, these uses and life in the neighbourhood itself became significant generators of cultural narratives and content. Indeed, the online community evident on sites such as Curbed is an extension and enhancement of a local 'scene' – social networks forming in physical space. Lower East Side bloggers meet up in the neighbourhood in addition

to corresponding online. Yet the internet content they generate enhances not only local social networks but also neighbourhood economic value. Its format reaches a global audience and can accommodate advertisers. This content has been translated by real estate developers, retailers and other entrepreneurs marketing a hip downtown lifestyle to more affluent consumers.

Tiziana Terranova, a scholar of internet culture and politics, would likely hold a nuanced view of the relationships between the personal stories and local narratives of place found in Curbed and other Lower East Side blogs and their creation of value in the digital economy as well as in local real estate:

[The] 'digital economy' [is] a specific mechanism of internal 'capture' of larger pools of social and cultural knowledge...It is about specific forms of production (web design, multimedia production, digital services and so on), but it is also about forms of labour we do not immediately recognise as such: chat, real-life stories, mailing lists, amateur newsletters and so on. These... are not produced by capitalism in any direct, cause-and-effect fashion, that is, they have not developed simply as an answer to the economic needs of capital. However, they have developed in relation to the expansion of the cultural industries and they are part of a process of economic experimentation with the creation of monetary value out of knowledge/culture/affect. (Terranova 2004, p.79)

Although LockhartSteele.com was not produced by a profit impulse, the blog is a product of a contemporary milieu of New York media workers experimenting with relationships between information, culture, and economics. This is a context where creativity and artistic innovation within new forms of communication are difficult to distinguish from innovation in value creation. Blogs do generate profit potential as they become new hosts for advertising, but these profits are not so immediate as to become a blogger's sole motivation. For several years after launching Curbed.com, Lockhart Steele was unable to quit his day job as a managing editor and humorously remarked that he soon expected to pull in 'five figures' (Business Week online 2005). And although Curbed's primary advertisers are large real estate developers – and through its observations he has become fully versed in the New York real estate market – Steele himself has never owned property. He continues to rent his walk-up tenement apartment on Rivington Street.

Market Differentiation

Another aspect of the translation of stories of place into content and value is the opening of specific local cultures to a global market. As Appadurai (1996) and others have noted, in post-Fordist reality, consumption has become increasingly differentiated and production grown flexible enough to respond to increasingly defined market niches. Micro-niches are attractive to advertisers

and business due to their ability to reach an extremely targeted audience with precision. The result is marketing efficiency and large profit potential. The Lower East Side and its particular urban subculture is perceived by the market to be one such micro-niche.

Furthermore, blogs and other websites provide a means to open the neighbourhood's local micro-cultures to a global market of consumers, businesses, and real estate developers. Lockart Steele himself has perceived his blogging to be, in a sense, a documenting of details of place to be read by outsiders:

A close friend observed to me after I'd been doing this site for some time, 'What you're really doing is micro-travel writing.' ...I think that Chatwin's Notebooks happen to remind me of weblog posts... (LockhartSteele.com 2004)

Latham and Sassen describe a rescaling that occurs online between global and local realities: 'What has tended to operate or be nested at local scales can now move to global scales, and global relations and domains can now, in turn, more easily become directly articulated with thick local settings (Sassen and Latham 2005, p. 2).

In addition, the intimacy of blogs and niche websites facilitates sequences of "viral marketing", or marketing that occurs when one individual forwards a link or web content to a friend. Contained in this gesture is an implicit recommendation and a sense of having "insider" information - extremely compelling and effective for marketing goods and services.

One illustration of both the local-global rescaling and 'viral marketing' present on the Lower East Side is the culture of the neighbourhood's hidden bars, referred to by Lockhart Steele on his blog. One such club, Happy Ending, is located in a defunct Chinese massage parlour but still maintains the signage and façade of the former establishment with no indication of its current use. Its name is a euphemism for the 'total release' massage previously offered on the premises. Inside the door, a video monitor plays a surveillance tape found in the space when the bar took over. The tape reveals the comings and goings of former Johns, and bar patrons proceed downstairs to listen to dj's in the old steam and massage rooms. Invisible to passersby or uninitiated local residents, the bar is nonetheless highly visible to a global network of trend setters. It has an elaborate website and is recommended on a growing number of internet culture sites and weblogs. This is its description on 'superfuture.com', a site describing itself as, 'urban cartography for global shopping experts' with listings for New York, Tokyo, Sydney, and Shanghai:

converted massage parlour and hot lower east night spot [09.2004]. best on tuesdays and fridays. [hard line hipsters]. total wild shenanigans down here. gets shut down by the cops at least once a month which is always a good sign. (superfuture.com)

In turn, the bar owner relies on content – the fact that his bar has a ‘good story’ – and the cachet of insider word of mouth for its continued popularity in a highly competitive market (Pihlar interview 2005).

Similarly, real estate advertisers are eager to place ads on Curbed despite its often ironic, critical tone towards new development projects on the Lower East Side because of a similar quality of ‘insider-ness’. As Lockhart Steele’s irony is a defining characteristic of the local hipster subculture, advertisers may feel they are reaching the target audience of ‘young money,’ per Nick Denton, or a distinct market niche attracted to the grittiness of a working class precinct in transition.

Finally, individual blogs themselves create niche markets in virtual space – in the ‘knowledge communities’ that form around the discussion and exchange of a circumscribed set of ideas and interests (Bach and Stark 2005).

The Digital Divide

Despite Curbed.com’s claims that it ‘democratises’ information about real estate investment and urban development, not everyone appears engaged in this democracy. For instance, the blog rarely chronicles any interaction with the area’s non-profit development corporations, a number of which have secured local city-owned sites and developed affordable housing. Rarely included as well is any discussion of life in the Lower East Side’s community gardens, over which long-time residents battled with the city to maintain as open spaces. Reading the Curbed and LockhartSteele.com blogs, one does not get a sense that members of the area’s Puerto Rican or Asian communities are e-mailing in tips or initiating online discussions about neighbourhood change. Although this discussion is certainly taking place in the community, it does not seem to be happening on the internet.

Websites have been created by the neighbourhood’s most active community organizations – many of which were established in the 1970s – but not blogs. These websites are updated infrequently and for the most part act as bulletin boards advertising more traditional forums for dialogue: monthly meetings and neighbourhood programs and events. Recently, community organizers protesting a proposed 24-story hotel development on Orchard Street posted flyers throughout the neighbourhood and held forums rather than posting to blogs or sending out e-mail (The Villager 2005). Expressions of community identity are abundant in physical space, if not virtual. For example, a host of murals in the neighbourhood celebrate Puerto Rican cultural heritage. Only since late 2006 have a few blogs appeared which rally efforts to stem displacement of the Lower East Side’s ethnic communities and local arts scene by a wave of new development

(i.e., savethelowereastside.blogspot.com and takeittothebridge.com). By this time, however, much displacement had already taken place.

Clearly, those most engaged online are the group of young workers already engaged directly or by association in the information economy. Curbed democratises information about real estate for them: young creative professionals who will eventually hope to buy a home and have a vested interest in tracking the shifting development landscape in New York.

Saskia Sassen, Manuel Castells and others describe the growing importance of urban centres and urban neighbourhoods in the new economy, but also the increasing polarization between affluent groups engaged in this economy and less affluent groups increasingly disenfranchised by it (Sassen 1991; Castells 2000). This social polarisation exists (fleetingly) as an intimate spatial condition on the Lower East Side.

Keith Hampton and Barry Wellman (Hampton and Wellman 2003) have also observed the polarising effects on community of ‘wiring’ some residents but not others. In Netville, a new suburb of Toronto where three out of five homes were connected by the developer to a local high speed network, they discovered that access to the network had the effect of strengthening a range of social and political ties between wired residents. In fact, the network even became a tool to organise collective action against the developer for non-delivery of services. However, those residents without access formed fewer relationships within the community and were much less aware of issues of local concern. Although a less controlled environment, the Lower East Side is experiencing social dynamics analogous to those in Netville.

Conclusion: Curbed, culture and urban redevelopment

Through its format of participatory dialogue, Curbed.com certainly succeeds in making visible what are frequently the invisible logics of power and capital in the gentrification and urban redevelopment processes – although this new visibility may be more empowering to a ‘knowledge community’ of blog-savvy internet users and real estate interests than to some local residents. Many of the hidden operations in urban revaluation discussed on the pages of Curbed.com have been studied in the literature on gentrification. Some of these include disinvestment, property flipping and other short term speculative manoeuvres, and the ‘selling’ of cultural images to promote real estate (Smith 1996; Mele 1994).

Sharon Zukin (1982), for example, theorises the emergence of an ‘artistic mode of production (AMP)’, which has arisen as

a subtle, culture-based mode of urban redevelopment in the face of resistance to more shocking urban renewal practices of demolition and displacement supported by the state and real estate sector – especially the programs of 1950s and 60s. Christopher Mele, who has studied how images of the Lower East Side's ethnic history and bohemian subcultures have been employed to sell art, entertainment, and real estate throughout the twentieth century, would concur with this vision of culture-based strategies of urban redevelopment:

As the culture industry reaches deep into the urban milieu of street corners, alleyways, basement bars and clubs to appropriate content to merchandise to consumers across the globe, it presents new opportunities for the urban redevelopment of neighbourhoods where such forms originate. (Mele 2000, p. 293)

Curbed.com, in its detailed documentation of these street corners, alleyways, and bars, is one outlet in the space of flows through which the culture and real estate industries have extended their reach. In the latest phase of the Lower East Side's transformation, larger developers and commercial retailers targeting urban niche markets have adapted and reconfigured the lifestyle of neighbourhood bohemians and local entrepreneurs. Meanwhile, invisible processes of capital accumulation that have been occurring beneath the surface are suddenly strikingly apparent in the neighbourhood's built landscape – in the form of new luxury condominiums, boutique hotels, and sleek high end restaurants.

Unexpectedly, urban renewal visions proposed in the 1950s and '60s of the area as a residential district for the professional class are, to some extent, now being realised. But instead of having been achieved with top-down methods of clearance and displacement that were successfully defeated by the community in the 1960s, this renewal has been a subtle process internal to the neighbourhood. Local artists, entrepreneurs, small speculators, and internet documentarians such as Lockhart Steele and other bloggers have gradually generated value and an opening for outside investors. This opening has been widened by pro-growth city administrations and sustained economic expansion in service and culture industries. Although bloggers may not have begun producing internet content with express motives of profit or real estate value creation, they have been part of what Tiziana Terranova (2004) describes as a process inherent in the expansion of cultural industries 'of economic experimentation with the creation of monetary value out of knowledge/culture/affect.'

References

- Appadurai, A. (1996) *Modernity at Large*, Minneapolis: University of Minnesota Press
- Bach, J and Stark, D. (2005) 'Recombinant Technology and New Geographies of Association', in S. Sassen and R. Latham (eds), *Digital Formations: IT and New Architectures in the Global Realm*, Princeton: Princeton University Press
- Castells, M. (1997) 'Hauling in the Future,' *The Guardian*, December 13
- Castells, M. (ed.) (2004) *The Network Society: A Cross-cultural Perspective*, Cheltenham: Edward Elgar
- Castells, M. (2000) *The Rise of the Network Society*, Oxford: Blackwell
- Dean, J. (ed.) (2006) *Reformatting Politics: Information Technology and Global Civil Society*, New York: Routledge
- Friedman, T. (2005) *Electric Dreams: Computers in American Culture*, New York: New York University Press
- Graham, S. and Marvin, S. (2001) *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*, London: Routledge
- Graham, S. and Marvin, S. (1996) *Telecommunications and the City: Electronic Spaces, Urban Places*, London: Routledge
- Hampton, K. and Wellman, B. (2003). 'Neighbouring in Netville: How the Internet Supports Community and Social Capital in a Wired Suburb', *City and Community*, vol. 2, no. 3
- Mele, C. (1994) 'The Process of Gentrification in Alphabet City,' in J. Abu-Lughod, (ed.), *From Urban Village to East Village: The Battle for New York's Lower East Side*, London: Blackwell
- Mele, C. (2000) *Selling the Lower East Side: Culture, Real Estate, and Resistance in New York City*, Minneapolis: University of Minnesota Press
- Sassen, S. (1991) *The Global City: New York, London, Tokyo*, Princeton: Princeton University Press
- Sassen S. and Latham, R. (eds) (2005) *Digital Formations: IT and New Architectures in the Global Realm*, Princeton: Princeton University Press
- Smith, N. (1996) *The New Urban Frontier: Gentrification and the Revanchist City*, New York: Routledge
- Terranova, T. (2004) *Network Culture: Politics for the Information Age*, London: Pluto Press
- Townsend, A. (2004) 'Digitally Mediated Urban Space: New Lessons for Design', *Praxis*, Issue 6
- Zukin, S. (1982) *Loft Living: Culture and Capital in Urban Change*, Baltimore: Johns Hopkins University Press

Articles on Curbed.com, Lockhart Steele, and Lower East Side

Business Week online, 'Online Extra: New York's Real Estate Know-It-All.' May 2, 2005.

Curbed.com, 'About Curbed.' July 1, 2005

Curbed.com, 'Freeman's Alley: From Darkness Into Light', March 1, 2006

Downtown Express, 'Steele blogging on the L.E.S', June 3, 2004

Downtown Express, 'Whole Foods, YMCA, and a mix of housing coming to E. Houston.' December 10-16, 2004

Gothamist.com, 'Lockhart Steele, Downtown Documentarian', February 2, 2004

Inman News, 'Neighbourhood Search a Boon for Real Estate', November 19, 2005

Iwantmedia.com, 'Lockhart Steele.' March 7, 2005

Krucoff, Andrew, 'Open Letter to Lockhart Steele and his Patrons of the Cause (aka 'Schiller's List'). Lasagnafarm.com. November 7, 2003

Krucoff, Andrew. Theotherpage.com. April 20, 2004

LoHo Realty's *Grand Street News*, 'The WASP that Crossed Delancey', January 2005

LockhartSteele.com. July 23, 2003

LockhartSteele.com. 'Schillers: Battle Lines Being Drawn', October 27-28, 2003

LockhartSteele.com. December 31, 2003

LockhartSteele.com. May 24, 2004

New York Post, 'Home Page Must Reads', June 5, 2004

New York Post, 'As posh real estate rolls over Lower East Side, locals lament local bars', January 27, 2005

New York Sun, 'City May Block Renewal of L. East Side', March 15, 2006

Toronto Star, 'Lower East Side's 'true' grit resists creeping respectability', March 24, 2005

Urban Probe Magazine, 'Curbed: A Neighbourhood Narrative – Lockhart Steele Keeps Real Estate Real', July 11, 2006.

The Village Voice, 'Exit Stage Lower East Side: The Closing of Surf Reality and the Theatorium Signals the End of a Theatrical Era', March 5-11, 2003

The Villager, 'Blogger's 'addiction' hooks many', May 26-June 1, 2004

The Villager, 'New group's going L.O.C.O on the Lower East Side', April 27, 2005

Articles on Web logs

Blogads, 'Mondo Gizmodo', November 18, 2002

New York Magazine, 'Blog Blog Blog', February 20, 2006

New York Magazine, 'Blogs to Riches: The Haves and Have-Nots of the Blogging Boom', February 20, 2006

New York Magazine, 'The Early Years: A Timeline of How Blogging All Began', February 20, 2006

New York Magazine, 'Meet the Bloggers', February 20, 2006

New York Magazine, 'The Long Tail Theory of B- and C-List Blogs', February 20, 2006

New York Times, 'A Blog Revolution? Get a Grip', May 8, 2005

New York Times, 'Hot Off the Web: Gossip and Design Guidance', January 27, 2005

Oculus, 'Talking into the Wind', Winter 05/06

SFGate.com, 'The New Pornographers', April 9, 2006

Urban Land, 'Blogging for Dollars', March 2005

Websites

Curbed.com

EBway.org

LockhartSteele.com

nycbloggers.com

savethelowereastside.blogspot.com

superfuture.com

takeittothebridge.com

Video Resources

Inman Stories, *New York Blogger*, documentary short film and interview with Lockhart Steele, 2005

Endnotes

¹ In 1999, this sub-sector showed an increase of 52% in revenue and 25% in employment.

² Townsend also refers to Steven Berlin Johnson's paper, 'Wireless Communications and the Future of Cities,' Taub Urban Research Center, NYU, April 2, 2003. <http://www.urban.nyu.edu/events/wireless>. See also Johnson, S. (2001) *Emergence*, New York: Scribner

IV. Writing visions through images

10. Questioning Pictures of Urban Futures

Torsten Schroeder

11. Skyscrapers and the 'Whole' City: Protected and Unprotected Views from the South Bank towards the City of London

Gunter Gassner

10. Questioning Pictures of Urban Futures

Torsten Schroeder

The three images placed at the start of this paper caught my attention. This set of pictures has in common the aim to envisage specific formations of urban futures in New York, Paris and London that promote the role of specific technological pathways in response to some sort of environmental threat. As representations they emerged from many cycles of inscriptions, bringing together specific sets of environmental science, technological potentialities and artistic representation.

"Dome over Manhattan" (figure 1) is a collage produced by Buckminster Fuller in 1960. It envisions encasing a section of

midtown Manhattan with a massive dome. Once completed, this giant 3 kilometre wide and 1.6 kilometre high transparent canopy-structure would cover an area of 50 blocks, allowing natural light to penetrate while providing protection from pollution and inclement weather conditions. Fuller translates the principle of climatisation with the utopian project of a geodesic dome to an urban scale. This climate-controlled environment was intended to substantially reduce energy consumption and costs associated with heating and cooling the enclosed buildings. Fuller described himself as an '*anticipatory design scientist*' and '*visionary*' capable of imagining a world less wasteful than the one he lived in.



Figure 1. Dome Over Manhattan. (Buckminster Fuller 1960. Courtesy, The estate of R. Buckminster Fuller. Reproduction with kind permission)



Figure 2. Vattenfall Energy for 2106. (Vattenfall advertisement 2006. Courtesy, Vattenfall AB. Reproduction with kind permission.)



Figure 3. Your Life in the Future. (Wired Magazine Cover 2009. Courtesy, Wired Magazine. Reproduction with kind permission.)

The double-spread Vattenfall advertisement (figure 2) appeared in a 2006 issue of *The Economist* magazine. It is entitled “Vattenfall, Energy for 2106, [...] we have a plan to combat climate change”. The Swedish power company Vattenfall (Swedish for waterfall) is one of the leading energy producers in Northern Europe. As of 2008³, it is Europe’s fifth-largest generator of energy and the largest producer of heat. In 2008, 50.2% of its energy production is from fossil fuel, 25.3% from hydroelectric energy, 23.0% from nuclear energy, 1.1% from wind energy and 0.6% from biomass and waste. Vattenfall operates in the UK, Netherlands, Belgium, Germany, Poland, Denmark, Sweden and Finland, and surprisingly, not in France. The waterfall as a mental image with predominantly positive connotations resonates in the construction of the picture above. After we detect the tip of the Eiffel Tower, the advertisement invites us to imagine ourselves drawn into an Amazon rainforest-like transformation of Paris. We can almost feel the humidity on our skin by spying the misty clouds in the distance. But where are the Parisians? Do they live in happy coexistence under the trees or has humankind been erased and mother nature reclaimed the urban realm? Precisely which innovation in energy technologies is subject to Vattenfall’s *green* vision for the year 2106 remains a mystery.

The *Wired Magazine* launched its UK debut in March 2009 with a science fiction future scenario of London on its cover (figure 3). It depicts a London where city dwellers adapt to life with flooded streets. The future energy problem seems to be solved by solar power plants and buildings that are routinely fitted with wind turbines and solar panels. Transport is partially carried out by cargo and passenger airships that take the strain off overcrowded roads, local trips take place on elevated transport networks and long distance travel is performed by air ships that make use of super-light gases. Food production appears to be locally sourced in town farms that are erected over existing buildings. The picture forms a *Blade Runner*²-like amalgamation that employs several clichés of sustainable technological practices and seems to be based on the belief that technology will be the remedy for future environmental problems.

Today, we cannot escape the prevalence of images used to picture our threatened environment. Newspapers, billboards and flat screens depict a diverse range of interpretations of environmental challenges, imagined futures and potentially less destructive pathways. These pictorial narrations of space and time stem from a vast range of cultural agencies. Life style magazines, local governments, non-governmental organisations, energy providers, fashion brands, architects and many more participate in the distribution of images and messages, aimed at informing, seducing, convincing, manipulating and entertaining us. What less environmentally destructive urban futures actually entail and how they can be envisioned remains an open question. In an

era of expanding digital picture worlds, where societal and urban conflicts are increasingly played out through picture regimes, we still struggle to write about pictures and struggle to understand how they work on us. With reference to the Writing Cities theme I attempt an approximation to the question of ‘*How do views shape pictures, how do pictures shape cities?*’. Pictures seem to have a language of their own that cannot solely be explained by linguistic models³. For pictures, the choice between artificiality and authenticity, visibility and invisibility, the made-up world and the real world, right and wrong, is doomed to failure. The question here is not about how to resolve this puzzle, but to address a set of questions that shed some light on the ‘magical’ and dynamic relationship between image-producer, beholder and the ‘real thing’ (in this case, the city).

This chapter questions how pictures are employed to envision potential urban futures. Pictures of anticipated urban futures are peculiar and paradoxical creatures, both concrete and abstract, specific individual things and a symbolic forms (cf. Mitchell, 2005, p. xvii). They are snapshots of a specific moment that reflect related myths, facts and discourses. I approach them through the representation of environmentally less destructive building technologies. Their pictorial deployment is often utilised as a key argument in promising an environmentally less destructive building performance. I take it as a fact that our future will be confronted with climate change to a smaller or larger extent⁴ and examine these pictures within this context. To approach how images and aesthetics are employed so as to represent seemingly less destructive built forms, it is useful to study particular cases and particular pictures. I tie my questions to pictorial representations employed within the design process of the London City Hall (designed and built by Foster and Partners Architects between 1998-2002).

Picturing environmental crises and visions

Images and pictures of environmental crises, conflicts and catastrophes play an important role in creating an awareness that humans increasingly threaten their own conditions of existence. Without techniques of visualisation and symbolic forms, without mediation and translation, environmental conflicts are difficult to make legible. ‘[I]f destruction and disasters are anticipated, then that produces a compulsion to act’. The compulsion to act does not arise out of consensus on a decision but rather on the disagreement over the consequences of any decision. Pictures of crises bring these conflicts into our cities and living rooms. They evoke simultaneity, shared involvement and shared suffering and thereby create a shared relevance for a global public and a global future. Pictures can destabilise existing orders and picture traditions. They have ‘the power to confuse the mechanisms

of organised irresponsibility and even to open them up to alternative possibilities for political action'. These events are highly mediated, highly selective, highly variable, highly symbolic, local and global, public and private, material and communicative. The 'political explosiveness' (Beck 2008) of global crises is largely a function of their representation in the mass media. Climate change is very different from any other large-scale and unpredictable political issue we have had to deal with before, as it is mainly an issue of future risk. Therefore pictures can play a significant role in rendering threats visible before it is too late.

Each epoch accumulates its own dominant ways of seeing and specific sets of pictures. In 1968 when Apollo 8 transmitted the first pictures of the earth as a blue, small and fragile planet embedded in a vast black universe, this way of seeing changed our understanding of our planet. The year 1979 was the first that scientists were able to take photographs of the shrunk arctic ice cap from satellites. These pictures were accompanied by pictures of polar bears on tiny ice floats that evoked emotional reactions of compassion. In 1985, the first pictures were released that depicted the hole in the ozone layer discovered over Antarctica. Four years later, in 1986, the world was shocked by the pictures of the Chernobyl disaster⁵ which depicted the worst nuclear power plant disaster ever recorded. In 1989 photographs of the Exxon Valdez oil spill⁶ envisioned one of the most devastating human-caused environmental disasters ever to occur at sea. Recently, in 2005, pictures of the vast destruction of Hurricanes Katrina, Wilma and Rita were circulated in mass media⁷. The multifaceted pictures of environmental crises, conflicts and catastrophes have been employed as 'evidence machines' (Holert 2000, p. 33) that depict specific formations of environmental problems. The depicted environmental crises are of local events and of a global endangerment. These crises mostly occur far away from cities, but today cities inevitably stand at the centre of the environmental future. Klaus Töpfer⁸ (2005) states, 'the battle for sustainable development, for delivering a more environmentally stable, just and healthier world, is going to be largely won and lost in our cities'. Cities therefore present strategic sites for addressing environmental crises.

Two conditions are relevant in the relationship between environment, society and cities: First is the profound global population growth and a prominent shift towards living in cities. The scale of growth and urbanisation prompts the demand to pursue less environmentally destructive patterns of development. Today cities are not only the drivers for economic growth, intellectual and cultural centres and important spaces for civic engagement, they are also the engines of consumption of the world's environmental

resources. Their impact stretches beyond their physical borders affecting regions, countries and the planet as a whole. Cities, therefore, are strategic sites to address the challenges of climate change, to contain such change, and to demand accountability. Second, the produced and threatened status of the ecosphere cannot be analysed as separate from cities and society. The problem is integral to urbanisation and urban activity and can only be grasped as consequences of our predominant modes of operation, of our societal activity (Beck 1999, p. 19). We live in a 'risk society in the sense that it is increasingly occupied with debating, preventing and managing risks that it itself has produced.' (2008). Bruno Latour defines the relationship of nature and society as being 'not two distinct poles, but one and the same production of successive states of societies-natures' (1993, p. 139). Within these 'societies-natures', crucial forces affecting depletion on all scales are not only 'the legal systems and profit making logics that underlie and enable many of the environmentally damaging aspects of our societies. [...] Non-scientific elements are a crucial part of the picture: questions of power, of poverty and inequality, ideology and cultural preferences, are all part of the question and the answer' (Sassen 2004). The activities within cities are not only the major originators of environmental problems, they also have huge potential to contain solutions to these problems. Approaches to alternative urban futures are highly contested and based on a diverse range of interpretations of the environmental challenge, suggested pathways and imagined futures. Regarding the future of cities, Töpfer states, '[a] world which has to be run with 80 percent less CO₂ cannot have the same urban structure as we have now.' (in Feireiss et al. 2008, p. 49).

Thus, the question is how to develop alternative approaches for the future, and how to suitably represent these in legible ways. It is important to create positive visions and positive images which open up possibilities, which have a positive implication for an urban future, and which are recognisable in terms of existing experiences of the city. In this context pictures play a decisive role as evocative formats: they have the potential to link the present with a future. The city and its envisioning is therefore a crucial site from which to address the challenges of climate change. The production of the urban environment depends on the production, appropriation and circulation of images; arguably they have moved centre stage as key tools in decision making processes. Kester Rattenbury examined the mutual relationship of images and pictures in the architectural context: 'Architecture's relationship with its representations is peculiar, powerful and absolutely critical' (2002, p. XXII).

Pictures and the built environment

Writers, such as Marshall McLuhan, described the change in how humans viewed the world and how these views were changed by putting emphasis on the adoption of new media (McLuhan et al., 1996). The practices of producing images are central to the cultural construction of social life in contemporary Western societies⁹. In the social sciences the arising concern for studying images is not only that they construct social differences, but the way images visualise, include and exclude social categories.¹⁰ In the mid-90s, W. J. T. Mitchell (2005) argued for a fundamental change in approaching the relationship of Western societies to the representations, the pictures and images that they produce and are surrounded by. Mitchell's formulation of the 'pictorial turn'¹¹ did not simply seek to endorse the cultural predominance of the visual. Instead, he sought a new picture theory that breaks with the ease with which we bring forward our interpretations of images and the ostensible ability with which we decode the ideological agenda behind an image narration. For Mitchell, pictures are not only about representation; more importantly, they are exemplars of what Bruno Latour (2002) calls '*factishes*' (facts plus fetishes), or hybrid objects oscillating on the borderline between truth and fiction, fact and belief. They are both autonomous and constructed, found and crafted, imitations and products. Today picture practices are rooted in broad and interdisciplinary contexts. They act as communication boosters, as evidence machines, as switching devices. Cultural, economic and scientific processes, which would otherwise be incomprehensible, are rendered plausible through pictures (Holert, 2000, pp. 32-33). We are confronted with the paradox of pictures being appropriated as legitimating tools and as well as the same pictures producing a truth of their own.

The word 'image' is notoriously ambiguous. Latour defines an image as 'any sign, any work of art, inscription, or picture that interacts as a mediation to access something else' (2002, p. 16). It can denote both a physical object (a printed photograph or a painting) and a mental, imaginary, psychological entity. Mitchell describes the picture image relationship: a picture as a concretely embodied object or assemblage, and of the image as a disembodied motif, a phantom that circulates from one picture to another and across media or in other. In Wittgenstein's words 'an image is not a picture, but a picture can respond to it'¹² (in Mitchell, 2005, pp. 72, 84).

Pictures of anticipated urban futures are peculiar, paradoxical creatures. They are amalgamations that reflect specific myths, facts and discourses. I attempt to shed some light on the mutual tie of the picture itself, the picture producer, the beholder, the real thing that is the built environment and its surrounding discourses.

We conceive of the environmental problem in different ways and pathways to less destructive urban futures are highly contested. To spot the opportunity for contestation over pathways we recognise in the United Kingdom a diverse group of individuals and organisations with very different articulations of what constitutes an urban future in the face of climate change, from the HRH Prince Charles, the Energy Saving Trust, Friends of the Earth, Royal Institution of British Architects, Building Research Establishment, the Green Building Council, British Petrol Solar, etc.. I choose here to question these diverse positions by focusing on pictorial representations of environmentally less destructive building technologies. 'Technology is the medium of daily life in modern societies. Every major technical change reverberates at many levels, economic, political, religious, cultural'. The contexts of technology include such diverse factors as relation to responsibility, initiative, and authority, to ethics and aesthetics, 'in sum, to the realm of meaning' (Feenberg 1999, p. vii). For urban futures the question of technologies is crucial. Everything from transport and communications, power generation, household appliances, water provision and waste recycling – 'all of these require careful evaluation in relation to the ecology of the city.' (Harvey and Sustainable Cities 2008).

As mentioned earlier, pictures are crucial in the imagining and making of the built environment and the visualisation of anticipated deployments of building technologies, is a key dimension often used to argue for the enhanced environmental performances of a particular project. When speculating about alternative futures of cities, the question of technology cannot be excluded. The three pictures in the introduction depict the central role of technologies for environmental futures as being between facts and fictions. They all rely on, and radically envision, specific technological pathways in response to specific environmental challenges. Buckminster Fuller's picture promotes a gigantic dome anticipated as lightweight structure. It allows for huge spans with a relatively minimal material input. The dome is envisioned as a huge climate buffer to decrease energy consumption for heating and cooling of the enclosed buildings. His domes have become a technological symbol for some form of *hippiesque* building culture; but this building form and technology has except a few realized examples not substantially altered building practices. The future scenario of the Vattenfall picture seems to predict the discovery of new non-fossil-fuel based energy technologies. The question of less destructive energy sources is central to urban futures and Vattenfall's business is centred around the operation of technologies to produce energy. The actual technologies here are rendered invisible and remain mysterious. The main theme of the *Wired Magazine* is on how technology affects culture, the economy, and politics. Their cover picture depicts an obsessive technology future scenario. Less destructive building technologies seem unavoidable and key to the urban future. Seen

this way it depicts a radical vision. However, non-technological pathways and questions of technological responsibilities and ethics are the picture's blind spots.

Picturing less destructive urban futures, the case of London City Hall

To focus on *imagineered*¹³ alternative urban futures I will examine the case and pictorial representations of the London City Hall which was designed and completed by Foster and Partners Architects between 1998 and 2002. City Hall has been described as an 'outstanding example of sustainable administration building' (Detail 2002, p. 1088). Foster and Partners have often been portrayed as environmental pioneers that deliver less destructive architectural and urban projects. I attempt to not merely ask what building technologies are represented or how building technologies are represented in these pictures (the site of the picture). I also attempt to pose some questions of as to how these representation are produced or manufactured through the many stages of inscription.

City Hall is located on the Southbank of the River Thames near Tower Bridge. City Hall is the new domicile and headquarters of the Greater London Authority which comprises the Mayor of London and the London Assembly. In this space, planning guidelines are drafted and enacted to direct London's urban future. The collage of the anticipated new London City Hall (figure 4) depicts a sunny day on the Southbank. The sky is light blue and untypically there are no clouds around. The collage is a montage of a site photo with an inserted computer rendering of one potential version of the future City Hall. On the left, from eye level perspective, we see the Thames and Tower Bridge monument. On the right we see tourists and Londoners on the river walk. They seem to spill out from or be magnetically attracted to their new City Hall. The building glares through sunlight reflection of the shiny metal shading elements that cover two third of the building's facade. The rendered City Hall shows ten floors of a unique and unusual building form that reminds of a futuristic oversized distorted egg. The façade of the building is fully transparent (in contrast to the actual built version) and from the outside we are able to look inside on its spiral stairs and through it into the blue sky.



Figure 4. Visualisation of the Greater London Authority Headquarters. (Foster and Jenkins 2001, pp. 216-217. Reproduction with kind permission.)

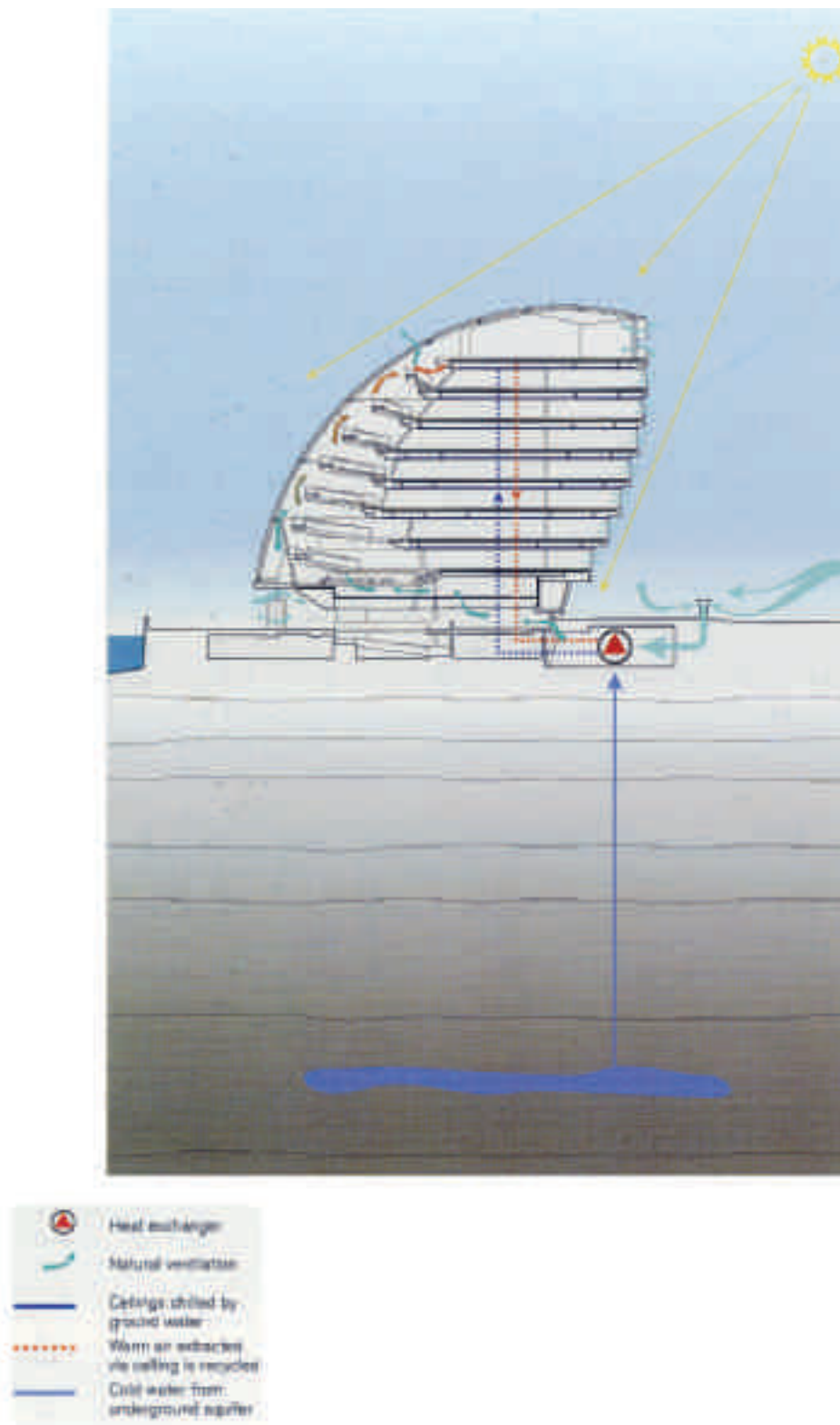


Figure 1. Greater London Authority Headquarters: natural ventilation and heating strategies combined with a form to minimise heat gain. (Foster et al., 2001, p. 10. Reproduction with kind permission.)

It appears as very empty. From this picture it is not clear how the anticipated building will meet the ground, so there are no indications of potential access and entrance situations.

In the same book, the *Foster: Catalogue 2001* (2001, p. 10), the City Hall project is accompanied and documented by a diagram (figure 5). The diagram combines a typical architectural section with many coloured arrows that point in different directions. It gives detailed information about the position and dimension of structural components like floor beams and façade supports. The diagram also suggests air flows and system-like interactions within its closed environment. The section depicts and embraces the sun in the blue sky. The building itself stretches over ten floors and basement level and reaches till approximately 120 meters below the earth surface. The building form is tilted towards direction of the sun and its façade is tangent to beams of sunlight. On the Thames side, the building section is smoothly curved and opposite the floor plates cantilever with increasing floor level to provide shadings. The left part of the building section indicates the vertical atrium with the spiral stair that reaches from the ground till top floor. On the right there are nine floors which are disconnected from the rest of the building. A legend explains the coloured arrows. The turquoise curvy arrows anticipate the natural ventilation strategies. The atrium is ventilated through an air intake next to City Hall and is extracted through windows on top of the atrium. The individual floors receive ventilation by adjacent open-able façade elements. Light blue arrows indicate groundwater pumped up via boreholes from the water table 120 meters below as cooling source in order to avoid energy intensive chillers. A heat exchanger transfers the cold to a building circuit that chills the internal ceilings.

The two pictures form complex amalgamations. These communication tools can be conceived as artefacts that bring together various actors as picture producers, particular sets of ideologies, calculations, visions, political compromises and material embodiments of the competing discourses that make up City Hall's building design process. These pictures provide particular ways of seeing. Both the City Hall collage and diagram depict reduced models of a world. They are snapshots of a specific moment, have their own bias, own constitutive knowledge and personal drive. They oscillate on the borderline between truth and fiction, fact and belief.

The two pictures of the anticipated London City Hall present a combination of different technological pathways. The most significant argument depicted for City Hall's environmental performance is through its building form, which can be described as an *elementary technology*²⁴ (or passive design strategy). The shape and alignment of the building is designed to reduce heat loss and gain through a minimised building envelope, thus

lowering its energy needs. Minimising the building's surface area through its spherical form results in 25% less surface area than a cube of the same volume. Principally this is an elementary technological strategy comparable to the principle of an igloo design. Foster and Partners achieve the effect through complex computer modelling and intensive construction efforts. The buildings skin consists of thousands of façade elements and none of them has the same shape. The depicted shading elements and natural ventilation arrows of the typical office floors also refer to elementary technologies. The 120 meter deep borehole sourcing of chilled ground water to cool the building can be described as a form of complex building technology. It involves various experts necessary for their implementation and additionally involves electronic and mechanical operation. High energy consumptions to generate chilled offices are thereby anticipated so as to be avoided.

The diagram becomes a key tool to argue for some sort of environmental performance of City Hall. It suggests a certain form of self evidence – as if a purely logical and rational result. Here, the representation might get confused with the *thing* itself (the completed and materialised building). While the anticipated City Hall as a thing will be predominantly concerned with its physical qualities - material, form, occupancy – it is here promoted and argued through its pictorial representations. But, since both collage and diagram are essentially partial, the question then becomes what are their blind spots? This way of seeing shadows that there could have been multiple other proposed technological pathways. This diagram is an almost a mono causal or mini system. With its sunbeams and airflows it evokes images of biological photosynthesis. These types of diagrams have become common *evidence machines* in representations of building design processes. But building technologies are embedded in processes, systems and networks that exceed these *picture-boundaries*.

The notion of the *picture-boundaries* leads me to raise questions about the *framings* of factors, forces, and scales taken into account and that were inscribed into the diagram during the design process of City Hall. Since the environmental discourse is fragmented and contradictory, I argue that it is crucial to first question how the environmental problem was defined during the cycles of picture production (the design process). What sort of consequences did this formulation imply for the design practices of City Hall and how did the formulation of the environmental problem resonate within the picture? Which technological responses were viable within the frame / formulation of the problem and where were its conceptual limits?²⁵ To innovate building practices we might have to escape the typical formulation of the environmental problem as a technical one, and reconsider the specific economic and social construction of the environmental problem.

In this context the question of *scaling* is a useful tool. Which scales (geographical, temporal) does the diagram account for? The City Hall project entails more than one scale. The depicted mini-system left crucial factors out of the picture. City Hall can be conceptualised as “multi-scalar” in terms of the geography of types of environmental damage it produces; in its demand for resources which entail a geography of extracting and processing that spans the globe; and in the sense that it materialises (or violates) a broad variety of policy levels (supranational to local). Further City Hall is subject to various temporal scales like life time assessments or investment calculations (cp. Sassen 2004). Where do the 13,100m³ of concrete, the 4050 tonnes of steel, the 7300 m² glass (3844 unique panels) come from to materialise City Hall?

The Intergovernmental Panel on Climate Change (IPCC) defines the future challenges for the built environment in order to reduce greenhouse gas (GHG) emissions from buildings, firstly, through reducing energy consumption (increased efficiency), secondly, switching to low-carbon fuels or including a higher share of renewable energy and finally, reducing embodied energy in buildings (2008, p. 391). But the issue is not one of energy-efficiency or renewable energy alone: ‘While occupant behaviour, culture and consumer choice and use of technologies are also major determinants of energy use in buildings and play a fundamental role in determining CO₂ emissions [...] the potential reduction through non-technological options is rarely assessed’ (2008, p. 389).

The diagram *freeze-frames* the anticipated deployment of several energy efficient technologies at a specific stage of the design process. It seems natural, for us as designers, that the normative measures of ecology or sustainability are spatial – to be resolved in a built form. However sustainability is essentially concerned with longer temporal frames¹⁶. To ensure the continued conservation we have to move from territory or ground, landscape, city, plan, and section to an ecological temporality, the continued conservation, that supports or houses technological potentials. City Hall can be studied in its different temporal phases of emergence. Thus the phase of construction (sourcing of materials) and the phase of operation (behavioural impacts) present key considerations to make City Hall environmentally less destructive.

The collage (figure 4) renders the future City Hall as a fully transparent building – offering the possibility to look inside and through the building. A transparent glass building is probably not the most effective response to producing a less destructive building. Building designs always have to fulfil various and partially contradictory demands that often lead to conflicts of interests. Sustainable building as model of ‘relational thinking’ (bringing things together) is profoundly implicated in the struggle

of tensions and contradictions, in the back and forth, that seeks to bring the included material and aesthetical, the technological and social relations in some sort of temporary equilibrium. The design process as a translation of some form of environmental challenge formulated at the outset of the project - into targets to be met through technologies - and finally into the materialised building is not simply a rational choice process; it hides its complex negotiations and struggles. Indeed, it can be described as a mysterious ‘black box’ process. All traces of ‘different producers of knowledge [...] their point of departure, their problem formulation, from different aspects of reality’ (Jamison in Guy and Moore 2007, p. 16) have been excluded from visibility. How could have alternative knowledge contexts transformed the picture formation?

Today, in architectural presentations, real-estate brochures and city marketing campaigns, the pictorial battlefield over the nature as a resource is in full flight. As Ulrich Beck writes, ‘[n]ature itself is not nature: it is a concept, a norm, a recollection, a utopia, an alternative plan. Today more than ever. Nature is being rediscovered, pampered, at a time when it is no longer there [...] What is there, and what creates such a political stir, are different forms of socialisation and different symbolic mediations of nature’ (Beck 1999, p. 21). Nature can be conceived as fiction, a mind image, the desire for ‘nature’ may stand for the wish for continuity and coherence, or be a projection for something completely different that may exist.

The Vattenfall picture (figure 2) playfully evokes this mechanism of nature as fictionalisation. Urban sustainability seen as model of *relational thinking* is profoundly implicated in the struggle of bringing together the tensions and contradictions, in the back and forth, that seeks to bring the included cultural, social and geopolitical relations in some sort of temporary equilibrium. Vattenfall’s vision for Paris in the year 2106 confuses the environmental problem, potential technological pathways and responsibilities because it excludes any proposal of how to bring together these contradicting struggles. The conglomerate of rainforest (and Eiffel Tower) as ideological and metaphorical schemata cannot be an interpretation model for an urban future. In this sense, Bruno Latour calls on us to ‘come out of the cave’ arguing that a ‘political ecology’ has to let go of the traditional term nature, because ‘nature is not a particular sphere or reality but the result of a political division [...] that separates what is objective and indisputable from what is subjective and disputable.’ (2004, p. 231).

Conclusion

Pictorial representations of urban futures are peculiar, powerful and critical. Our understanding of the built environment, as I have argued, is influenced and shaped through pictures, and at once the built environment is re-produced through the appropriation of its pictures. These future-pictures are highly complex, paradoxical assemblages. I pointed out how the envisioning of the environmental crises can become political by creating the compulsion to act. I also argued for the importance of establishing positive pictorial urban visions.

With the case of City Hall I emphasised the importance to analyse both the way in which pictures represent chosen technological pathways and also to question how a representation as a final product is produced or manufactured through the many stages of the design process. However, pictorial representations are always partial and what they omit, or leave out is crucial to our analysis of what they serve to represent. To give a complex picture and to map the struggles and conflicts that are subject to the practice of building urban futures, we have to bring together and superimpose multiple pictorial accounts. This requires inventing and pioneering alternative and far less destructive building strategies, together with pictorial representations that break with the current picture making practices in architectural practice. For example, questions of ecology or sustainability are fundamentally routed in temporal scales³⁷, accordingly our pictorial accounts have to move from territory, ground, map, plan and section also to pictorial representations of temporal timeframes. Further, I suggest, to examine and produce pictures of building technologies from within their social and cultural contexts and conceive of them as images of complex lived and produced realities.

The aim of this paper is to question current urban picture worlds and traditions, in order to search for limitations and opportunities. In this vein it suggests entering a different perception and picture making practice of the city. The task is to insert alternative picture narrations or counter-pictures that reformulate the paradigmatic codes of connections between nature, building technology, usage, design and pictorial representations. The city-image can potentially become a site for exploring and provoking new possibilities for imagining an urban future: where the city itself, its people, its activities and its forms are all part of the problem and all part of the solution. The city-image can potentially become a site of the subversively strange and pleasurable, of disturbing recalcitrance and resistance.

References

- Beck, U. (1999) *World Risk Society*, Cambridge MA: Polity Press
- Beck, U. (2008) *Risk Society's "Cosmopolitan Moment"*, Lecture at Harvard University, November 12th, 2008. <http://www.labjor.unicamp.br/comciencia/files/risco/AR-UlrichBeck-Harvard.pdf> [Accessed 12th March, 2009]
- Berger, J. (1972) *Ways of Seeing*, London: Penguin
- Detail. (2002, September) 'Concept, Office Building', *Detail Magazine*, vol. 9, pp. 1086-1109
- Feenberg, A. (1999) *Questioning Technology*, London: Routledge
- Feireiss, K., and Feireiss, L. (2008) *Architecture of Change: Sustainability and Humanity in the Built Environment*, Berlin: Gestalten
- Foster, N., Jenkins, D., and N. (2001) *Foster: Catalogue 2001*, Munich: Prestel
- Guy, S., and Moore, S. A. (2007) 'Sustainable Architecture and the Pluralist Imagination', *Journal of Architectural Education*, vol. 60, no. (4), pp. 15-23
- Hajer, M. A. (1995) *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*, Oxford: Clarendon Press
- Harvey, D., and Sustanianble Cities (2008). *David Harvey: The Right to the City*. <http://sustainablecities.dk/actions/interviews/david-harvey-the-right-to-the-city>
- Holert, T. (2000) *Imagineering. Politik der Sichtbarkeit*, Köln: Oktagon Verlag
- IPCC. (2008) *Climate Change 2007 : Mitigation of Climate Change: Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press
- Kravagna, C. (1997) *Privileg Blick : Kritik der visuellen Kultur* (1. Aufl. ed.), Berlin [u.a.]: Ed. ID-Archiv
- Latour, B. (1993) *We have never been Modern*, Cambridge MA: Harvard University Press
- Latour, B. (2004) *Politics of Nature: How to bring the Sciences into Democracy*, Cambridge MA: Harvard University Press
- Latour, B., Weibel, P., and ZKM. (2002) *Iconoclash*, Cambridge MA: MIT Press
- Mitchell, W. J. T. (2005) *What do Pictures want? The Lives and Loves of Images*, Chicago: University of Chicago Press
- Rattenbury, K. (2002) *This is not Architecture: Media Constructions*, London: Routledge
- Rose, G. (2007) *Visual Methodologies: An Introduction to the Interpretation of Visual Methods*, London: SAGE
- Sassen, S. (2004) 'The Central Role of Cities in our Environmental Future', *Encyclopedia of Life Support Systems, Human Settlement Development*. <http://www.eolss.net> [Accessed 8 October 2007]

Endnotes

- ¹ Based on "Vattenfall's key facts and figures - in brief", retrieved from <http://www.vattenfall.com/en/key-facts-and-figures.htm>
- ² *Blade Runner* is a 1982 American science fiction film, directed by Ridley Scott
- ³ W.J.T. Mitchell points to the insight that forms of reckoning (the seeing, the gaze,...) pose equally far-reaching difficulties like the different forms of reading (the deciphering, the decoding,...) and that visual perception or the visual ability to read might not be fully explainable by models of textuality (in Kravagna 1997, p. 19). John Berger states, 'Seeing comes before words. The child looks and recognises before it can speak. [...] Yet this seeing which comes before words [...] can never be quite covered by them.' (Berger 1972, p. 1).
- ⁴ I refer here to the 'Climate change 2007: mitigation of climate change: contribution of Working Group III to the Fourth Assessment Report' of the Intergovernmental Panel on Climate Change (IPCC, 2008)
- ⁵ On April 25th -26th, 1986 the Chernobyl (former USSR, now Ukraine) Nuclear Plant Meltdown was the world's worst nuclear power accident occurred.
- ⁶ Occurred in the Prince William Sound, Alaska, on March 24, 1989
- ⁷ This hurricane season produced the costliest as well as one of the five deadliest hurricanes in the history of the United States.
- ⁸ Klaus Töpfer was the executive director of the United Nations Environment Programme (UNEP) 1998 to 2006.
- ⁹ Stuart Hall argued that culture 'is not so much a set of things [...] Primarily, culture is concerned with the production and exchange of meanings – the 'giving and taking of meaning' – between the members of a society or group.' (in Rose 2007, p. 1).
- ¹⁰ To question the picture beholder relationship we have to acknowledge that the image consists of multiple sites or scales. Gillian Rose emphasises images as existent of multiple sites and modalities. Interpretations of visual images broadly concur that there are three sites through which the meaning of an image is made: 'the site of the production', 'the site of the image' and 'the site of the audience'. Each of these sites has three different modalities: the 'technological' defines the visual technology as 'any form of apparatus' designed to either look at or to enhance natural vision. The 'compositional' refers to specific material qualities. When an image is being made it draws on a number of formal strategies: content, colour and spatial organization. Thirdly the 'social', a range of economic, social and political relations, institutions and practices surround an image and through which it is seen and used. (cf. Rose, 2007, pp. 6-13)
- ¹¹ W. J. T. Mitchell questions the almighty power of the linguistic turn, under which the arts, media and other cultural forms are predominantly interpreted by linguistic, semiotic, rhetoric and other models of textuality. Instead he argues for the importance of a 'pictorial turn' as an independent picture theory.

¹² German „Eine Vorstellung ist kein Bild, aber ein Bild kann ihr entsprechen“

¹³ imagine plus engineer, cp. Tom Holert: *Imagineering. Politik der Sichtbarkeit* (2000)

¹⁴ Technology is a broad and elusive concept. It can be said to deal with a species' usage and knowledge of tools and crafts, and how it affects a species' ability to control and adapt to its environment. Under *elementary building technologies* I understand basic architectural design strategies like for example shading elements or natural ventilation designs. Under complex *building technologies* I understand strategies that rather involve various experts necessary for their implementation and that most likely involve some forms of electronic and mechanical operation.

¹⁵ The Dutch political scientist Maarten Hajer argues that the... '[...] discourse of ecological modernisation recognises the ecological crisis as evidence of a fundamental omission in the workings of the institutions of modern society. [...] whether or not environmental problems appear as anomalies to the existing institutional arrangements depends first of all on the way in which these problems are framed and defined. That is what the environmental conflict is about. In this context the emergence of ecological modernisation as the new dominant way of conceptualising environmental problems becomes an important topic of analysis. It raises a long list of compelling questions: What can be thought within its structures? Where does it hit its conceptual limits?' (Hajer 1995, pp. 2-3)

¹⁶ The World Commission on Environment and Development (the Brundtland Commission), agreed in 1987 on a definition of sustainable development that is now generally recognised: 'Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. http://www.unngosustainability.org/CSD_Definitions%20SD.htm

¹⁷ Most sustainability definitions suggest to ensure the continued conservation of living conditions

11. Skyscrapers and the 'Whole' City: Protected and Unprotected Views from the South Bank towards the City of London

Gunter Gassner



Figure 1 (top). A helicopter is circulating above the City of London in-between Tower 42 and 30 St Mary Axe seen from the South Bank. (Gassner 2009)

Figure 2a & b (middle & bottom). Metropolitan and riot police keep protesters in check in front of the Bank of England. (Gassner 2009)

I started to work on this paper on the 1st of April, 2009. Equipped with some maps, my notebook and a borrowed digital camera, I walked from the Royal National Theatre to the Tate Modern on the South Bank. Along this stretch of the so-called Queen's Walk, I have selected two sites which I will compare in terms of their views towards the City of London (City). It is a warm and sunny day; unusually pleasant for London at this time of the year. Walking along the South Bank of the River Thames is evidently a widely appreciated activity, facilitated in recent years by a number of architectural projects to improve and extend the River walk. The South Bank – and in particular the stretch between the theatre and the museum – is full of people; something we know in the modern city as spaces that are dedicated either to consumption or tourism. The South Bank is both. Cultural institutions as well as multiple tourist shops and food chains contribute to the character of public spaces that seem to transfigure citizens into tourists in their own city. Yet, the public spaces are as much defined by adjacent programs, seasonal events, streetscapes and user groups as by their distant views, by the City of London's skyline.

As I walked I noticed an unusual noise. It took me a little while to realise that it was coming from a helicopter that was circulating above the City (figure 1). The 1st of April was the day before the G20 summit in London and protests have been predicted in the City: protests against the current regulation of the banking system, the increasing gap between rich and poor countries; against capitalism in general. From the Tate Modern it is less than a twenty minute walk to the Bank of England. I decided that an analysis of the City's skylines required an inspection of the City from within.

By the time I arrived at the Bank of England, the junction in front of it was already closed off. Hundreds of protesters were kept in check by metropolitan and riot police. An equal number of curious onlookers joined the spectacle (figure 2). Showcases of exclusive boutiques and monuments were barricaded with plywood panels. Slogans – at that point mostly directed against the police – were loudly proclaimed, flyers and beer cans were thrown.

In the following days, I heard that political leaders had agreed that markets and financial institutions should be subjected to "appropriate" control: they had called for effective sanctions against "tax havens" and had advocated the doubling of funds available to the International Monetary Fund. I also found out that on the 1st of April protesters had smashed windows of a branch of the Royal Bank of Scotland and that one man died in the protest after he collapsed within a police cordon that had been set up to contain crowds. Two weeks later, I heard that a metropolitan police officer, who had been caught on film attacking a member of the public who subsequently died, had been suspended from duty and was facing manslaughter charges, after a second post mortem concluded that the man had died from internal bleeding and not a heart attack.

Protests against a globally operating financial service industry, which is heavily concentrated in the financial precinct of the City of London, are described by some as just in time or even as too late. London, hit strongly by the current "credit crunch", is due to transform its built environment substantially, as the many tower cranes in the city indicate. In the future, the City's skylines will display, promote and celebrate – even more than today – London as a global city of speculative economic value. Although the area of the City has concentrated financial services for centuries, up until the 1980s, St Paul's Cathedral and an additional one hundred and twenty smaller churches dominated the City's skylines. Today, the three tallest buildings in the City (Tower 42 and 30 St Mary Axe at its centre and Broadgate Tower at its northern fringe) are office high-rises, hosting primarily FIRE (financial, insurance and real estate) programmes. Additional office high-rises, such as the Heron Tower and the Pinnacle at its very centre, are under construction. While today the economy operates on a global scale, the question for this paper is how this global economy is communicated, displayed and visually superimposed upon London as a "whole". Globalisation suggests to be a "unifying" strategy on a global scale. But what conceptualisations of unity and wholeness do we use in creating a locally specific image in a global context by means of the notion of skylines?

In the paper I will compare two different views from the South Bank towards the City of London: one from a viewpoint close to Gabriel's Wharf, the other approximately one hundred and twenty metres further west (figure 3). While the former is protected by the current London Plan (GLA 2004) and the London View Management Framework (LVMF) (GLA 2007), the latter view is absent from either of these planning documents. I will start by comparing the distinctive viewing places and their respective views before I introduce theoretical and historical aspects of skylines and their relationship to wholeness. I will refer to the notion of the picturesque as an Enlightenment approach towards an all-embracing wholeness and compare it with modern strategies relating to skylines in the context of globalisation. Finally, I will analyse the two selected views and the concepts of wholeness they encapsulate, according to the content of the view in relation to the fixed position of the observer and the mobile observer.

The analysis in this paper is based on my observations and is developed through my own visual material. The purpose of the drawings which follow is to examine spatial as well as social issues and to use them as an analytical tool rather than more simply as illustrations. While I examine the existing top-down ideology of controlling and framing the look-out, my observations are certainly framed by the intention to produce this paper, which is part of my broader PhD research about professional skyline discourses in London. I was familiar with the concept of Protecting Views before I undertook the above mentioned stroll, which was motivated by the idea of empowering nearness as a strategy to challenge modern urban planning that is too often based on separation and exclusion.

The protection framework

The City is London's historical core, as well as the oldest of its two financial service industry hubs, the other being Canary Wharf. One of the reasons why views of the City from across the River

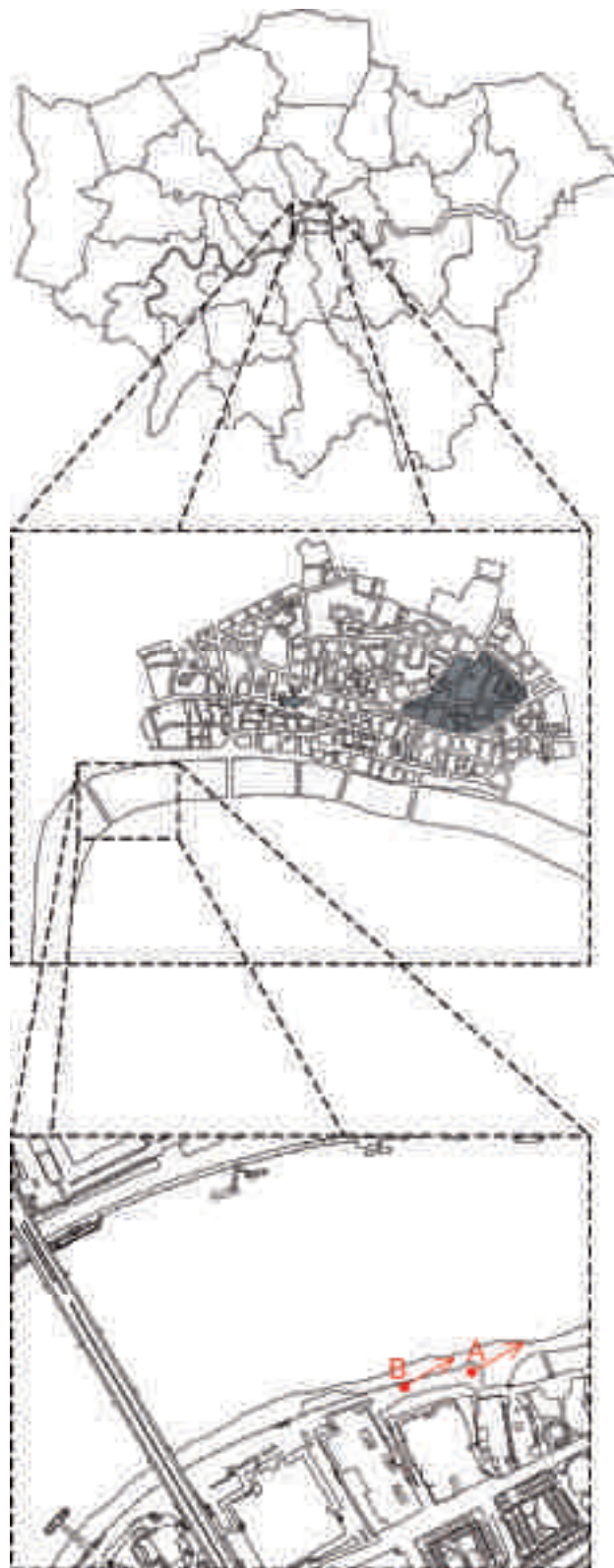


Figure 3. (from top to bottom) London's 32 boroughs and the City of London as the historical core of London; The City of London with St Paul's Cathedral and the area of the Eastern high-rise cluster highlighted; Protected view from viewpoint A and unprotected view from viewpoint B. (Gassner 2009)

Thames are distinctive is the fact that the City's urban layout makes it difficult to get an overview and sometimes even to orientate oneself from within it. After the Great Fire of 1666 all schemes for rebuilding London, and most notably those of Sir Christopher Wren, made use of the rational order of the Roman grid and the ceremonial order of axes connecting important public sites (Barion 1997; Richardson 2001). Yet, the design proposals were all rejected, the possibility of "rationalised" improvement was put to an end and the City remained a medieval warren as a consequence most of all of the 'citizen's ferocious attachment to their property rights' (Rykwert 2000, p. 49). Still today, narrow and crooked streets result in extremely short viewing distances from within the dense City fabric itself. This leads to a lack of reference points beyond the immediate context of the street which, in turn, hampers a spatial understanding of the City as a single entity with a sense of "wholeness".

The majority of tourists and citizens who walk along the South Bank are probably familiar with the city they see in the distance. Martina Loew emphasises the intrinsic relationship between the built structure that is viewed much like an image and the graphic representation of the city (Loew 2008, p. 140 ff). City-images have become increasingly important, primarily in the place-branding used to attract businesses and tourists. However, this inverts the relationship between our understanding of the world and our visual lexicon of urban images. We tend to measure our understanding of the world in terms of similarities with familiar images, rather than the other way round (ibid., p. 170).

Which representations of the City of London do citizens and tourists find most familiar? Which images do they know already and still want to find again? When it comes to distant city representations, legally "Protected Views" are of special importance. Protected Views – the idea of selecting particular viewing places from which historically significant buildings need to be visible – have been formulated in London for the first time in 1934, when St Paul's Height Code was established. Since then quantitatively more views have been controlled in an increasingly more accurate way. In 2004, Ken Livingstone, who was then Mayor of London, designated twenty six strategically important views in the London Plan (GLA 2004), of which twenty focus on historical buildings in the City or "central London" (GLA 2007).

The notion that the future image of the city should be defined through a set of selected views is unique to London, Robert Tavernor (2007) argues, and is borne out of a desire to find a way of balancing what is cherished for London's past with the demands of the future. An idea that is derived from a traditional approach to viewing cities, particularly in Europe, which has its roots in Italian urban view paintings, so-called 'vedute' (Tavernor 2007). Most notably Antonio Canaletto's interpretations of London as the "Venice of the North" in the eighteenth century

had and still have a substantial influence of how and also from where London is portrayed.

In the London View Management Framework (LVMF) designated views are differentiated according to the way they are assessed. For the majority of views this is done qualitatively. Additionally, so-called "Protected Vistas" focus on "Strategically Important Landmarks" and are not only qualitatively but also geometrically defined (GLA 2004, p. 187; GLA 2007, p. 23 ff, 34). On the South Bank, in between the Royal National Theatre and the Tate Modern, there is no geometrically defined Protected Vista, but two qualitatively assessed views: one from a viewing place close to Gabriel's Wharf and the other one from the public space in front of Tate Modern. Both offer an "uninterrupted" view of the City across the River. While the latter focuses mostly on one building – due to the axial viewing direction towards St Paul's, the Millennium Bridge as an axial physical connection and the dominant role of the Cathedral in terms of its height as seen from that viewpoint – the former gives an unhindered view towards the Eastern high-rise cluster, including three of the currently four tallest buildings in the City.

There are an infinite number of views that are not mentioned in any planning guidance. Policy 4B.15 of the London Plan describes the criteria for designated views: the viewing place must be open, publicly accessible and well-used, a place in its own right allowing for a pause and enjoyment of the view. Significant parts of London must be visible in the view. The view must be highly valued and allow for the appreciation and understanding of London as a whole, or of major elements within it (GLA 2004, p. 185). Following these criteria I have selected two views for this analysis: one from close to Gabriel's Wharf and the other is an "unprotected" view that is approximately one hundred and twenty metres further west.

In the process of abstracting urban complexities to images and drawings, I faced the question as to which aspects of the city should be included and excluded in this analysis. By introducing a specific empirical method I rendered a third view for the same scene on top of the chosen protected and unprotected views. With respect to the visual material I have decided on the process of outlining, a sort of contour tracing. Rather than reading urban elements as sketches of masses or volumes I represent the city as flattened views. Aspects, such as colours, texture and atmospheric perspective are excluded in the drawings. Other aspects, such as size and height relationships, though, which I regarded as particularly important for this analysis, are more explicit.

The visual representations I use draw a clear border between an "inside" and an "outside" and privilege the form of the outer, towards the inner; an aspect that I regularly come across in my

analysis of skyline discourses. While in the very limited available academic literature on skylines the content and the method are often at odds, in this paper, I use the above mentioned approach towards writing/drawing cities, at the risk of downplaying and excluding other valuable information.

Protected and unprotected views

From the viewing place close to Gabriel's Wharf (figure 4) viewers are offered an uninterrupted line of vision towards the City. The space is bordered with an approximately one metre high fence towards the River Thames. The ground material is a hard surface. Several benches, facing the City, the North Bank and the main walkway, are provided. Additionally, there are some waste bins.

The viewing place of the unprotected view is in front of the London Television Centre (figure 5). In contrast to the viewing balcony close to Gabriel's Wharf, it is part of the main walkway and is not specifically dedicated to the experience of viewing the City in the distance. In this area the Queen's Walk is a forty metre wide strip; half adjacent to the river with hard surface, the other adjacent to the Television Centre with grassland. Like in the other viewing place, waste bins and benches are provided. The benches are arranged linearly; some of them face the Thames, others the Television Centre. Two lines of mature trees emphasise the space's longitudinal direction. Planted in the 1960s and thinned in the 1980s, the plane trees on the South Bank grew remarkably well. They are protected by Tree Preservation Order Number 170 and form 'an integral part of the area's character and act as a unifying element along Queen's Walk from Jubilee Gardens to the IBM building' (CaUDLP 2007). They are important in many views and mirror planting on the North Bank of the Thames (ibid.). Their importance lies also in the fact that they cast pleasant shadows, and on a sunny day such as the 1st of April 2009, more people are inclined to pause on these benches than on the ones within the viewing place of the protected view. The space of the unprotected view is prominently lit by "sturgeon" lamp posts with globe lanterns. These historic cast iron lamp standards are emblazoned with ornate, entwined sturgeons, were designed by Timothy Butler in the 1870s and are listed Grade II (CoW 2003).

From the viewing place close to Gabriel's Wharf (figure 4) viewers are offered an uninterrupted line of vision towards the City. The space is bordered with an approximately one metre high fence towards the River Thames. The ground material is a hard surface. Several benches, facing the City, the North Bank and the main walkway, are provided. Additionally, there are some waste bins.

The viewing place of the unprotected view is in front of the London Television Centre (figure 5). In contrast to the viewing balcony close to Gabriel's Wharf, it is part of the main walkway

and is not specifically dedicated to the experience of viewing the City in the distance. In this area the Queen's Walk is a forty metre wide strip; half adjacent to the river with hard surface, the other adjacent to the Television Centre with grassland. Like in the other viewing place, waste bins and benches are provided. The benches are arranged linearly; some of them face the Thames, others the Television Centre. Two lines of mature trees emphasise the space's longitudinal direction. Planted in the 1960s and thinned in the 1980s, the plane trees on the South Bank grew remarkably well. They are protected by Tree Preservation Order Number 170 and form 'an integral part of the area's character and act as a unifying element along Queen's Walk from Jubilee Gardens to the IBM building' (CaUDLP 2007). They are important in many views and mirror planting on the North Bank of the Thames (ibid.). Their importance lies also in the fact that they cast pleasant shadows, and on a sunny day such as the 1st of April 2009, more people are inclined to pause on these benches than on the ones within the viewing place of the protected view. The space of the unprotected view is prominently lit by "sturgeon" lamp posts with globe lanterns. These historic cast iron lamp standards are emblazoned with ornate, entwined sturgeons, were designed by Timothy Butler in the 1870s and are listed Grade II (CoW 2003).

In the unprotected view the lampposts and the trees feature prominently in the view. Together with the Thames they build the foreground. The middle ground consists mostly of buildings with river frontages on the North Bank. Some tall buildings, including St Paul's, constitute the background. Existing office high-rises are partially hidden behind the trees and the lampposts (figure 7).

While the unprotected view is narrowed by street furniture in the foreground, the protected view by comparison is an almost 180 degree wide prospect from Waterloo Bridge to Blackfriars Bridge 'with Somerset House a significant but not prominent feature in the west, St Paul's Cathedral at the centre of the view and the City cluster forming the skyline in the east' (GLA 2007, p. 171) (figure 6). Following the LVMF, the middle ground consists of mature trees along the embankments and buildings with river frontages and the Thames dominates the foreground (ibid.).

Evidently, both viewing places are places to pause. Due to the design of the River Walk, visitors of the protected view are offered an alcove, slightly adjacent to the main walkway. People sit down, enjoy the view or have lunch. Only a few people pace up and down (figure 8).

In contrast, the space of the unprotected view is directly integrated with what constitutes the main walkway. However, the observed activities were not limited to walking. The linear arrangement of the street furniture provokes different parallel activities: people stand or pace up and down and enjoy the view, some of them lean against the fence to get a "clearer" view,

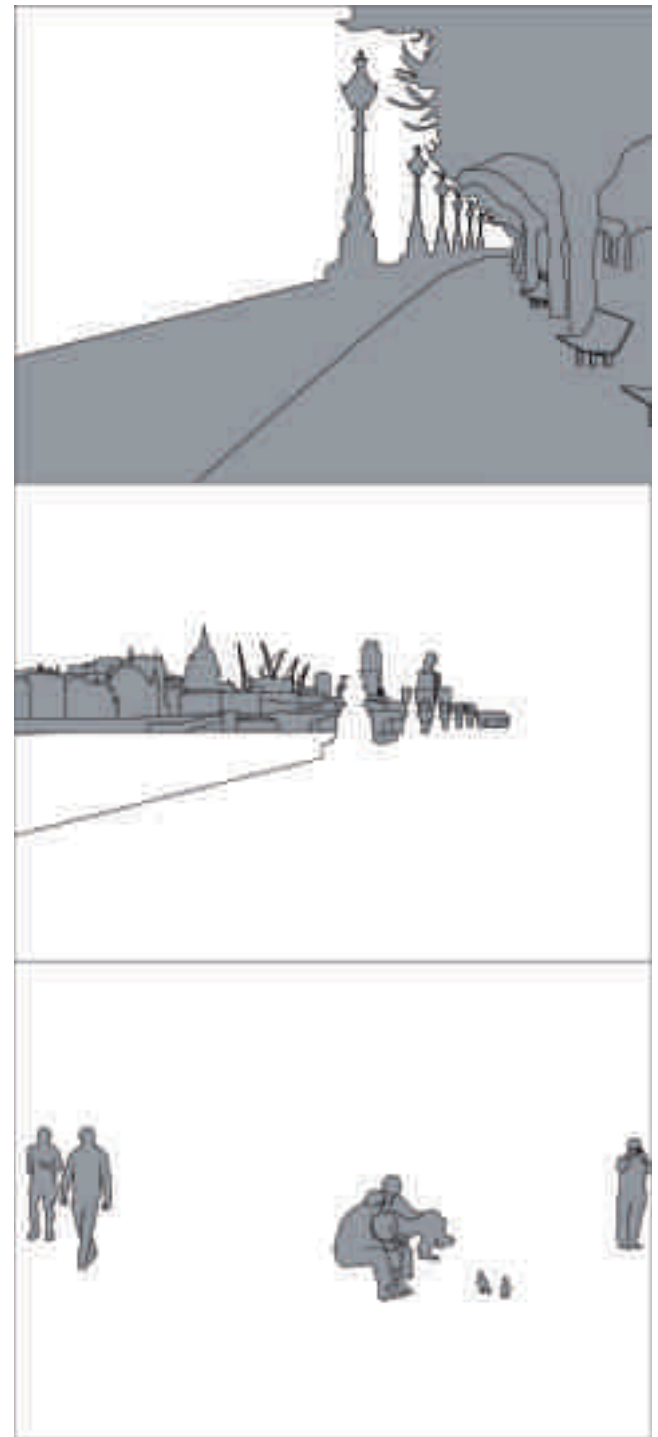


Figure 4 (top left). Street furniture within the viewing place of the protected view. **Figure 5 (top right).** Street furniture within the viewing place of the unprotected view.

Figure 6 (middle left). Protected view of the City of London in the distance. **Figure 7 (middle right).** Unprotected view of the City of London in the distance.

Figure 8 (bottom left). Range of activities within the viewing place of the protected view. **Figure 9 (bottom right).** Range of activities within the viewing place of the unprotected view.

(Gassner 2009)

others walk, sit on benches and enjoy the view towards the North Bank perpendicular to the river, have lunch or just pause under the trees; some jog others sit or lie in the grass (figure 9).

To summarise, the crucial difference between the two views is that the viewpoint of the protected view is dedicated solely to the experience of viewing the City in the distance while the viewpoint of the unprotected view is part of the main walkway and additionally offers some remarkable views towards the City. The protected view is defined as a clear distant view with a very reduced foreground, mostly expressed by a lack of street furniture. The uninterrupted and protected view together with the limited street furniture in the viewing place result in a mono-functional space with a small range of predictable activities, typical of modern city planning.

According to professional guidelines, protected views are supposed to help people – residents and visitors – to understand ‘London as a whole, or of major elements within it’ (GLA 2004, p. 185). How is an understanding of London as a whole and also of “whole” London approached; in particular as views are essentially fragmented by experience and time? Before I will discuss this in more detail it is helpful to explain some theoretical and historical aspects of skylines and their relationship to wholeness.

Skylines and wholeness

The perception that will render the image of “wholeness” in one’s head may be a complex assemblage of visual cues that are partially provided by the view, partially remembered, partially experienced by other means. In this paper, however, I want to emphasize a “collective wholeness”, in which the observer’s remembrance and experience are downplayed; yet, its emphasis lies on what is shown and the way it is shown, rather than how it is read by citizens and tourists.

At an earlier stage in my PhD research process, I analysed how the notion of skylines as “whole entities” is used in the current London context. Focusing on what experts say when they are speaking as experts, I discovered that the idea of skylines is widely used but not clearly defined in earlier and current London planning policies. I went on to categorise how the city is abstracted through its skylines: the abstraction of the city to an elevation (a flat representation of the city seen from a distance), to icons (a selection of buildings and spaces of prestige) and to the city’s silhouettes (an invented upper border).

In current design and planning discourses in London, skylines are commonly referred to the design principle of “Townscape”, as developed in the UK from the 1940s onwards, as well as the

Enlightenment notion of the “picturesque” with the interest of planning for points of views and sequential visual experiences. Gordon Cullen describes Townscape as an art of relationship, where its ‘purpose is to take all the elements that go to create the environment: buildings, trees, nature, water, traffic, advertisements and so on, and to weave them together in such a way that drama is released’ (Cullen 1995, p. 7).

The premise of Townscape is to give visual coherence and organisation to different spatial elements. It is an attempt to encompass diversity in unity. In the second half of the twentieth century this understanding of diversity was primarily framed by an integration of historical and modern architecture (Macarthur 2007, p. 201). The technique of the picturesque was also to bring elements together, but they were all contributing to an all-embracing wholeness. It is a technique that draws spaces together and is equally interested in the mundane, lived by necessity, and the near-at-hand.

In his analysis of Townscape (and based on references to the picturesque), Cullen emphasises that unity and drama in views are released as a consequence of three different aspects: firstly, the relationship between different elements, between “this” and “that” in the view; secondly, the relationship between the viewing place and the view, between “here” and “there”; and thirdly, the relationship between different views. Architects and urban planners draw heavily upon these historical references, although, as many thinkers argue, the concept and the significance of unity have changed since the Age of Enlightenment. The eighteenth century, in Michel Foucault’s account, is a time that placed things in empirical categories and files; these tabular categories were by definition infinite, and hence, all-embracing. From the nineteenth century onwards, things were to be clear and distinct, analysed in terms of identity and difference, of measurement and order (Foucault 2008). Richard Sennett describes the Enlightenment ideal of wholeness as an ‘open window’ where everything inside was engaged with everything outside (Sennett 1990, p. 85). The Enlightenment ideal of wholeness has transformed, as modern culture ‘divides between the subjective experience and worldly experience, self and the city’ (ibid., p. xii) and unity came to refer to what objects are in themselves.

How do current planning techniques in a global city refer to past and contemporary concepts of unity and wholeness and to the modern definition of the “totality” of well-made things? In line with Gordon Cullen’s emphasis of the three main concerns of Townscape, I will analyse the two chosen views on the South Bank in terms of the content of the view, the position of the viewer and the mobile observer (Cullen 1995).

Content and the "whole" city: "this" and "that" in views

The built environment in London is a diverse mixture of styles, materials, and scales. Although Sennett argues that the city is a 'revelation of otherness, of discontinuity, rather than of secret elective affinities waiting to be joined' (Sennett 1990, p. 88), the design project of uniting the different elements in the city is one of the aims of Townscape (Cullen 1995, p. 11). One way to create spatial unity is to treat all elements equally and to impose one formal logic over wide urban areas and their skylines. Yet, many thinkers and practitioners argue against such an approach, accusing mega-plans of being inherently undemocratic and unrepresentative of the diversity of the city.

In contrast, picturesque principles of unification did not mean treating all elements equally. Price's theoretical ideas, for example in *Essay on the Picturesque, As Compared With The Sublime and The Beautiful* (1794), and John Nash's work in Regent Street (completed in 1825) in the early nineteenth century suggest that they no longer supposed that architecture acted on buildings and cities with equal criteria. Relatively few buildings, acting in concert, could have the effect of 'uniting the whole group' (Macarthur 2007, p. 188). Arguably, the modern concept of Protected views, and the following subdivision of the built environment into "valuable" and "valueless" parts for the "whole" city is a particular way of treating urban elements unequally. The top-down classification of buildings into "Strategically Important Landmarks" (St Paul's Cathedral, the Tower of London and the Palace of Westminster), "Other Landmarks" (such as the Monument in the City and also the Royal National Theatre or the Tate Modern on the South Bank), and buildings that are not mentioned (for example Tower 42 and 30 St Mary Axe in the City) constitutes evidence of this approach (see GLA 2004; GLA 2007).

Any assignment of general values to buildings is questionable, since people's "attachment" to a building (tourists' and even more so citizens' in their every-day lives) is variable. With respect to skylines the situation is even more pointed, because only the tallest buildings of the city can be seen in a distant view. Tall buildings are expensive to design and build and they involve a difficult planning process in London. As a result tall and low buildings often represent the economical and political "powerful" and the "powerless" (see Zukin 1991). In distant views of the City, then, "valuable" is automatically part of "powerful".

In the protected view on the South Bank three of the four tallest buildings in the City – St Paul's Cathedral, Tower 42 and 30 St Mary Axe – are prominent. In the unprotected view, however, the two office high-rises cower in between and are partially hidden behind the street furniture in the foreground. In views towards the City of London, unity that refers to what objects are in themselves

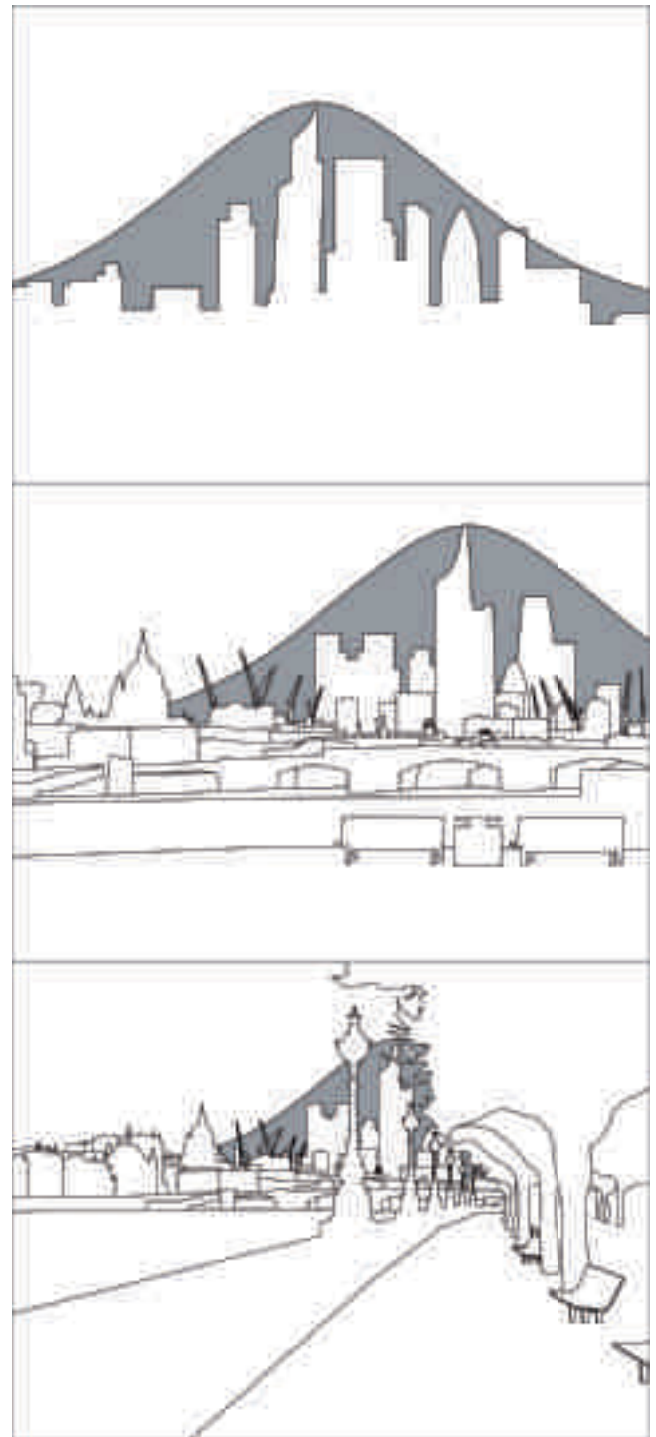


Figure 10. Predicted future economic skyline of the City of London in 2012 seen from the South Bank.

Figure 11. Predicted future economic skyline of the City of London in 2012 seen from the viewing place of the protected view.

Figure 12. Predicted future economic skyline of the City of London 2012 seen from the viewing place of the unprotected view. (Gassner 2009)

rather than an all-embracing wholeness can be identified on an architectural and on an urban scale. In both cases this unity relies on an uninterrupted line of vision from the viewing place to the distant view.

Since the form of a building has freed itself from many technical constraints (in particular from structural and thermal ones due to technical achievements) the value of a building as a form is often at odds with the value of a building in use (see Sennett 1990, p. 98). Although less technical constraints mean that a function can be accommodated more accurately, formal freedom regularly leads to forms that solely refer to themselves. A fundamental purpose of these forms, then, is to be gazed at. The superior concern for the form of the building and the uninterrupted view towards the form are reflected in contemporary building names. While in the past names referred mostly to the use, location, or owner of the building, most current and future buildings (and in particular tall buildings that can be seen from the distance) have nicknames that describe their visual appearance, such as the "Gherkin" for 30 St Mary Axe, the "Shard of Glass", the "Walkie-Talkie", or the "Pinnacle" (also "Helter-Skelter"). Any interruptions in the foreground, such as trees and lampposts in the unprotected viewing place, then, might be regarded as "bothersome" by observers.

The modern cult of the object can also be seen on an urban scale and that in elevation rather than in plan. Royal Fine Arts Commission's (RFAC) vision for the future built environment of the City of London resulted in what may be termed a "topographical skyline" with a gradual rise from the predominantly low-rise structures to a pinnacle in-between Tower 42 and 30 St Mary Axe seen from the South Bank (figures 10 to 12). Viewed as a geometrically defined graph (as opposed to a 'revelation of discontinuities and otherness, which, in order to encompass and even provoke urban pluralities, is less predictable), the future economic skyline treats the city as a definable and well-defined object, not like a constantly evolving entity. The gradual rise from low to high structures, as defined for the future economic skyline, establishes a kind of "goal" for London's urban development. Once the form of a bell-curve is completed, London's economy is supposed to be displayed perfectly, and only then. Yet, the specific object city will be only recognisable from a few protected viewing places, which turns it into a two-dimensional image, into a fragile idea. Only a concentric height development in the City would make the object and the idea it is supposed to communicate consistent. Having in mind the realities of current planning activities in London, this, however, is more than unlikely.

Position and the "whole" city: "here" and "there"

In observing the city from a distance, the observer establishes a relationship between the viewing position and the view. Cullen talks in this context of 'our reactions to the position of our body in its environment' (Cullen 1995, p. 9). The relationship between the viewing place (the "here") and the view (the "there") is what Humphry Repton, a landscape designer in the eighteenth century, described as the "character" of a place (see Macarthur 2007; Daniels 1999). In the context of enclosure, gradually privatized open land (see Rykwert 2000), Repton often worked on small designs near cities, so he was adept at using foregrounds and changes in topography to create a degree of exclusivity and compositional unity in view (Macarthur 2007, p. 12; Daniels 1999).

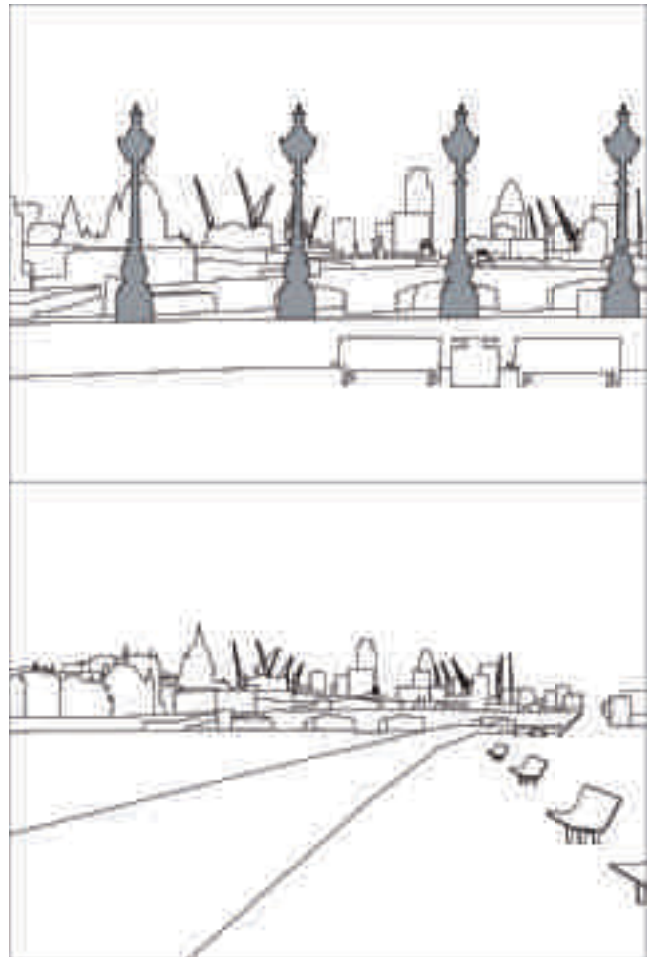


Figure 13. Manipulated protected view: existing distant view and street furniture plus additional street furniture (lamp posts) from the viewing place of the unprotected view.

Figure 14. Manipulated unprotected view: existing distant view and reduced street furniture (no lamp posts and trees). (Gassner 2009)

What was outside the park should be made to seem a part of it, which is a technique he called "appropriation". To stop the property boundary becoming a major feature of the park he reduced the contrast between the park and the agricultural countryside and allowed the boundary to be permeable to view and movement (Macarthur 2007, p. 181).

The main difference between the two selected views on the South Bank is that there is less "here" in the protected one in terms of foreground, streetscape and the range of activities within the viewing place. In the unprotected view the "here" is visually determined mostly by trees and lampposts (figures 13 and 14). Both elements refer to "whole" London, but in different ways. The lamp standards point to London's history and the Victorian era. They recall Sir Joseph Bazalgette's civil engineering project for the Embankment in the second half of the nineteenth century, which aimed at improving drainage and sewerage as well as offering opportunity for improved transport links both above and below ground (CoW 2003).

The Conservation Areas Statement for Lambeth's Embankment states that the trees on the South Bank refer to the vegetation on the North Bank. Yet, in the specific protected view there are hardly any trees visible on the North Bank. Today, the built environment of the City seen from the South Bank hardly creates visual links to nature. London's hinterland is not high enough to be seen in the background of the view. However, in line with cities such as Hong Kong and San Francisco, the future economic skyline of the City will commemorate nature. But whereas in other cities this is done either by "measuring" the height of the built environment in comparison to the city's hinterland in a view or by referring the height of buildings to the specific location of the city's topography, in London the future "topographical skyline" will mimic nature.

The form of the future economic skyline seen from the South Bank "requires" an uninterrupted line of vision, as mentioned above, yet its disguise thematically links to interruptions created by trees in the foreground. The background of a view is always evaluated against the foreground. The protected view offers a clear outlook of the City but no sensate links between the City and the South Bank. On an architectural scale, "complete visibility" with reduced exposure of the other senses, finds an equivalent in the modern use of plate glass. Many contemporary buildings, and in particular office high-rises that will form the future skyline of the City, are sealed boxes of complete visibility due to thermal glass walls and the use of air-conditioning. The world that is visible through the glass has devalued its reality; 'a man sees from his office window a tree blowing in the wind but cannot hear the wind blowing' (Sennett 1990, p. 109). Visibility, then, is combined with isolation.

On the 1st of April 2009 one could hear the noise of the helicopter that is circulating above the Bank of England. Nowadays, most of the time, however, there is no sound, no smell, and surely no tactile impulse coming from the City that can bridge the distance. On an architectural scale isolation might be avoided, for example, when users can open a window; on an urban scale when elements nearby refer to what can be seen in the distance and when the "here" has a recognized quality in itself, which might be difficult to argue for when the "here" is almost lacking.

Motion and the "whole" city: serial vision

For Geoffrey Scott, an English scholar, poet and historian of architecture in the early twentieth century, picturesque was simply a condition in which space was perceived in motion rather than measured from a static point (Macarthur 2007, p. 16). Sennett explains that the significance of "movement" in the city changed during the centuries. From the eighteenth century onwards it was thought that movement stimulated the organism. 'While the Baroque planner emphasized progress toward a monumental destination, the Enlightened planner emphasized the journey itself' (Sennett 2002 p. 264). Repton tested his schemes from several "key" viewpoints and Cullen points out that 'although the pedestrian walks through the town at a uniform speed, the scenery of towns is often revealed in a series of jerks of revelations' (Cullen 1995, p. 9). In the modern world, in particular since Albert Einstein's theory of relativity, motion refers to a new principle of unity: the unity of space and time. But how can this unity be created on an urban scale? In modern architecture it was meant to be achieved on two fronts. One is the idea of being at two different places at the same time (an idea that has been tested by cubist painters), the other an invitation to move.

On an architectural scale the former meant to reduce visual separations as much as possible and so led to the production of great sheets of plate glass. The uninterrupted line of vision is an equivalent on an urban scale. But how can people be invited to move? The observer might not move, or at least move less, when the "big picture" or the one of the whole reveals itself at a glance. On an architectural as well as on an urban scale an invitation to move might mean that each space has its own logic and can only be "understood" by a direct local engagement with it. On a visual urban scale it might additionally mean that the distant view is fragmentary. The street furniture on the South Bank often intersects the view of the background elements subsequently linking the specific view to other views, because an understanding of the "whole" distant view is not immediately possible. Whereas in the space of the protected view most people either stand or sit on a bench and look towards the City's skyline, the activities in the space of the unprotected view are much more

diverse. People walk around, lean over the fence, walk back to confirm a view they have had already, and so forth, in order to get a “fine” view towards the City that includes the street furniture in the foreground.

The future economic skyline of the City, approached as a two-dimensional form, will enhance even more these tendencies to emphasise the abstract skyline (figures 15 and 16). Yet, defined from a few protected viewpoints it will also be unrecognisable from unprotected ones, because either the gradual rise of the built environment will not appear as “smooth” from the specific viewpoint or because elements in the foreground will blur the “smoothness” of the logic that is superimposed upon the city as a whole.

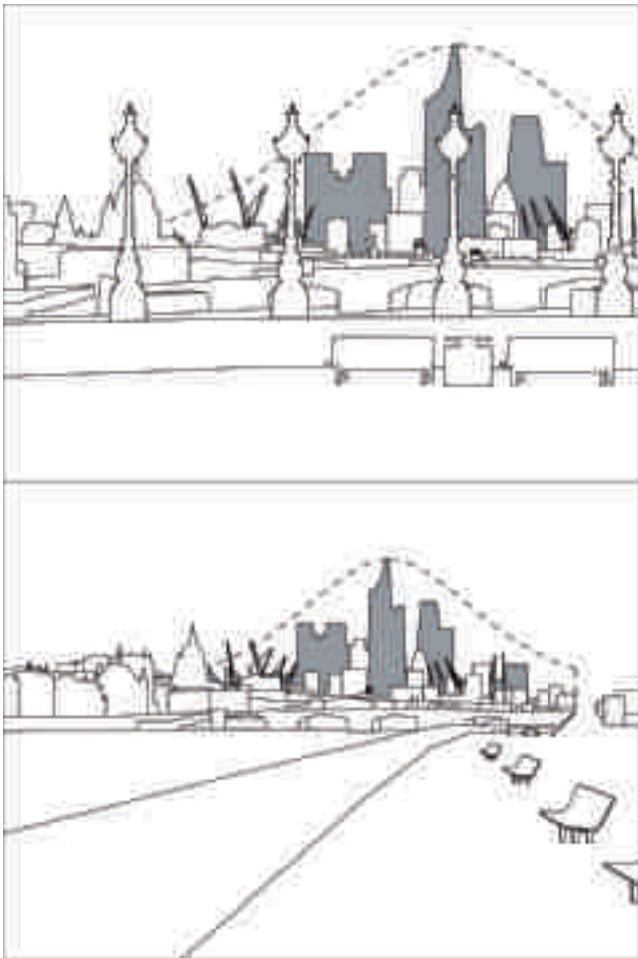


Figure 15. Manipulated protected view: existing distant view plus additional street furniture from the unprotected viewing place including predicted skyline of the City of London in 2012.

Figure 16. Manipulated unprotected view: existing distant view without street furniture including predicted skyline of the City of London in 2012. (Gassner 2009)

Conclusions

In a peculiar way, the current economic recession is paired with an increasing spatial and visual display of the prominence of financial services in London. Despite rather pessimistic predictions for London's economy in the near future several new office high-rises are under construction. The future economic skyline of the City will represent London as a quintessential global city where economic services are concentrated, despite widespread anger and doubts about the operation of the financial services industry, as we have seen on the 1st of April, 2009.

The formal and visual appearances of financial services have become increasingly influential in how a city's role in globalisation is portrayed. While globalisation might be thought of as a “unifying” economic strategy displayed through the visual form of the city, similar to the Enlightenment notion of the picturesque, the creation of London's city-image is, to a substantial degree, based on strategies of dividing, separating and excluding. “Manhattanisation”, as the speculative insertion of the high-rise typology, points not to the uniqueness of a skyline but to the increasing uniformity of the global city. Yet, in the context of the increasing importance of a city-image to attract businesses and tourists, concerns related to wholeness can be identified on several scales: the creation of a strong, unambiguous city-image aims simultaneously at uniqueness at the global scale and uniformity at the city scale (Loew 2008).

The city-image of “whole” London is controlled by means of protecting specific views. To distinguish between elements worthy and not worthy of protection is arguably a rather modern concept that is based on diversity and the idea of unity that refers to what objects are in themselves. Unity as something that is all-embracing, in comparison, is an Enlightened ideal. There is a tendency that not only the concept of protection but the specific way this is done in London enables and supports the modern concept of unity.

The protected view on the South Bank is characterised by an uninterrupted line of vision towards the City, reduced street furniture and a small range of different activities within the viewing place. These characteristics support distinct unities and forms that refer to themselves on an architectural (in particular office high-rises) as well as urban (the future economic skyline) scale. The “complete visibility” of the City in the distance is achieved at the expense of a sensate experience of the viewing place, which points to a combination of visibility with isolation, which can be referred to the modern development of tall sealed glass boxes. The unprotected view, by comparison, is characterised by a rich foreground and a wider range of different activities within the viewing place. The street furniture interrupts

the view of the City in the distance, links the viewing place to the whole city and invites people to move, in order to understand the City as a whole.

The specificity of the notion of skylines in London are its conceptual links to the concept of Townscape and picturesque techniques. While some professionals, such as architects and urban planners, are hardly aware of these historical concepts, others have developed strategies and judgements that are no more than a rationalised history. Yet, professionals operate in contemporary society and within a modern framework of protecting views. Strategies for how to deal with diversity in the distant view of a global city, distinctly programmed viewing places, or the lack of a foreground, need to be developed. Both, a blunt or ideological application of historical principles and an ignorance of their potential values are problematic.

Epilogue

Half a year later, on the 24th of September, 2009, I walk another time from the Royal National Theatre to the Tate Modern on the South Bank. It is colder and less sunny than it was on the 1st of April. Still, the South Bank is also today full of people. It is the day before the G20 summit in Pittsburgh. Similar to London in April, also this G20 meeting begins against the backdrop of intense security in the city's downtown (itself full of high-rises) which is cordoned off and under virtual lock-down as leaders make their arrival. Hundreds of police officers clad in riot gear patrol the streets, occasionally using tear gas to disperse about 2000 anti-globalization protesters.

Within the last six months the City's built environment has changed, most notably as the super-structure of the Heron Tower appeared in distant views from the South Bank. Similar to almost half a year ago, in the protected viewing place people sit on provided benches and look at the City in the distance, which presents itself differently in the autumn light. In the unprotected viewing place the leaves of the plane trees have turned brownish, some of them have fallen off. Within the next few weeks the trees will give free look-outs to wider parts of the City in the distance. Similar to my observations in April, different activities are taking place in the unprotected viewing place close to Gabriel's Wharf.

While my observations on the 1st of April, 2009, suggested that the protected viewpoint is a mono-functional, typically modern space as analysed at a specific time, my observations half a year later support these initial ideas by giving them an additional long-time aspect. The changed character of the unprotected viewing place, on the other hand, does not result in a loss but in a transformation of the space. This transformation, as well as

other crucial aspects of London's skylines, are downplayed in line drawings, like the ones I am using. What these representations highlight is that only the superimposition of different forms of writing and drawing London has promise to fully explore the potential and limitations of the concept of protected and unprotected views.

References

- Barion, X. (ed.) (1997) *London 1066 – 1914: Literary Sources and Documents*, East Sussex: Helm
- City of Westminster (CoW). (2003) *Conservation Area Audit: Strand, Number 16*. http://www.westminster.gov.uk/docstores/publications_store/The%20Strand.pdf [Accessed 20 April 2009]
- Conservation and Urban Design Lambeth Planning (CaUDLP). (2007) *SouthBankConservationArea: ConservationAreaStatement*. <http://www.lambeth.gov.uk/NR/rdonlyres/D58380AA-1448-4F35-A775-235DCF907AF2/0/southbankCAstatement19.pdf> [Accessed 20 April 2009]
- Cullen, G. (1995) *The Concise Townscape*, Oxford; Boston: Butterworth-Heinemann
- Daniels, S. (1999) *Humphry Repton: Landscape Gardening and the Geography of Georgian England*, New Haven: Yale University Press
- Foucault, M. (2008 [1966]) *The Order of Things: An Archaeology of the Human Sciences*, London: Routledge
- Greater London Authority (GLA). (2004) *The London Plan: Spatial Development Strategy for Greater London*, London: Greater London Authority
- Greater London Authority (GLA). (2007) *London View Management Framework: The London Plan Supplementary Planning Guidance*, London: Greater London Authority
- Loew, M. (2008) *Soziologie der Staedte*, Frankfurt am Main: Suhrkamp Verlag
- Macarthur, J. (2007) *The Picturesque: Architecture, Disgust and Other Irregularities*, London; New York: Routledge
- Richardson, J. (2001) *The Annals of London: A Year-by-Year Record of a Thousand Years of History*, London: Cassell & Co
- Rowe, C. & Koetter, F. (1984) *Collage City*, Cambridge MA: MIT Press
- Rykwert, J. (2000) *The Seduction of Place: The City in the Twenty First Century*, New York: Pantheon Books
- Sennett, R. (1990) *The Conscience of the Eye: The Design and Social Life of Cities*, New York; London: W. W. Norton & Company
- Sennett, R. (2002 [1994]) *Flesh and Stone: The Body and the City in Western Civilization*, London: Penguin Books
- Tavernor, R. (2007), 'Composing London Visually', in A. Marcuse and D. Neumann (eds.) *Visualizing the City*, New York: Routledge
- Zukin, S. (1991) *Landscapes of Power: from Detroit to Disney World*, Berkely: University of California Press



Figures 17a, b, c & d (from top left clockwise). Protected view, protected viewing place, unprotected viewing place, unprotected view. (Gassner 2009)



